



Bulletin of the

NATIVE PLANT SOCIETY OF OREGON

Dedicated to the enjoyment, conservation, and study
of Oregon's native vegetation

VOLUME 25 NUMBER 1

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ITS RENEWAL TIME!

2ND NOTICE

The NPSO membership year is January to December. Now is the time for members to renew.

But first...check your address label on the back page of the *Bulletin*. You may already be paid for 1992. If there is a 91 on the top line, you need to renew now.

A remittance envelope was included with the December issue of the *Bulletin*. Or you can use the membership form on the inside back page.

NPSO membership gives you access to field trips, programs, classes, and two publications: the monthly *Bulletin*, and the annual *Kalmiopsis*.

It is also a good time to consider a tax-deductible contribution to our special funds. The Leighton Ho Memorial Award is used for summer research projects in Western Oregon, and can be a matching grant in cooperation with The Nature Conservancy. The Rare and Endangered Plant Fund supports work with our most threatened plants. The new Sallie Jacobsen Memorial Fund goes to creation of an interpretive project in memory of Sallie Jacobsen. This fund was subject of an article in the December issue of the *Bulletin*. Contributions can also be made to the NPSO general fund.

Your membership and donations make it possible to carry out more of the many projects that are needed to pursue the goals of NPSO.

CHAPTER NEWS

IMPORTANT NOTE TO FIELD TRIP PARTICIPANTS:

Field trips take place rain or shine, so proper dress and footwear are essential. Trips may be strenuous and/or hazardous. Please contact the trip leader for information about difficulty, mileage, and terrain. Participation is at your own risk. Bring water and lunch. All NPSO activities are open to the public at no charge (other than carpool mileage), and friends, newcomers and visitors are always welcome.

Notice to field trip chairs and leaders: The Forest Service and other Federal agencies have set policies limiting group size in wilderness areas to 12. The reason for this is to limit the human impact on these fragile areas. Each group using wilderness must be no larger than 12.

Blue Mountain

6 Jan., Mon.

MEETING. 7:30 pm in Room 130, Morrow Hall, Blue Mountain Community College. Program to be announced.

Corvallis

PLEASE NOTE: THE CORVALLIS CHAPTER NOW MEETS ON THE 2ND TUESDAY OF THE MONTH, RATHER THAN ON MONDAYS.

14 Jan., Tues.

MEETING. 7:30pm in the Corl House, 3975 NW Witham Hill Rd., Corvallis. Tom Kaye will talk on the "Reproductive Ecology of Bradshaw's Lomatium".

Emerald

13 Jan., Mon.

MEETING. 7:30pm in the Library, Kennedy Middle School, 2200 Bailey Hill Road, Eugene. Dr. Ethen Perkins will show slides and speak on: "Reproductive Biology of Butterfly Milkweed, *Asclepias tuberosa*." Dr. Perkins will explain the results of his research on this beautiful milkweed of the East and Midwest. For more information, call Jenny Dimling (343-3242).

18 Jan., Sat.

WORK PARTY: Dave Dunlap, Lane County Roadside Vegetation Management Director will coordinate efforts to replant *Sidalcea campestris* along county road right-of-way. These plants were previously moved for protection during highway construction activity. Participants should bring a shovel, gloves and hard soled shoes. Lunch and drink optional as this project should be completed around noon. Meet at Mt. Pisgah Arboretum at 10am. For more info., call John Koenig (935-7677).

10 Feb., Mon.

MEETING. 7:30pm in the Library, Kennedy Middle School, 2200 Bailey Hill Road, Eugene. Dr. Daphne Stone, an expert on lichens, mosses and liverworts, will show slides and speak on: "The Ecology of Lichens and Some Interesting Lichens of Alaska, Oregon, California and Georgia." Dr. Stone's new brochure, "Lichens and Mosses of Mount Pisgah Arboretum," will be available. For more information, call Jenny Dimling (343-3242).

9 March, Mon.

MEETING. 7:30pm in the Library, Kennedy Middle School, 2200 Bailey Hill Road, Eugene. Ellen Deehan Clark, Lane Community College Botanist, will show slides and speak on "Belize: Mayan Jungle and Coral Reef." Ms. Clark will discuss her recent explorations of the rain forest jungle and the shoreline of this Central American country on the Caribbean. For more information, call Jenny Dimling, 343-3242.

High Desert

28 Jan., Tues.

MEETING. 7:30pm at The Bend Senior Center on NE Marshall. Sue Anderson, lepidopterist supreme, will speak about "Butterflies and Botany". She will share slides of her years of research into the types of butterflies in Central Oregon and the kinds of plants they prefer. Don't miss this one.

Mid-Columbia

8 Jan., Wed.

MEETING. The 2nd Wednesday of the month due to the New Year's holiday! 7:30pm at the Mosier School. Mike and Jerry Igo will present a multimedia review of their BLM Cost Share Challenge project surveying for *Astragalus peckii* species near Tumalo.

North Coast

18 Jan., Sat.

FIELD TRIP. Meet at 10am at Cape Lookout parking lot for hike on beach to observe sand dunes, whales and birds. For more info., call Jim Winslow (842-2246).

28 Jan., Tues.

MEETING. 7pm at Tillamook PUD Meeting Room, 1115 Pacific, Tillamook. Members should bring 5 slides of plants to share.

Portland

14 Jan., Tues.

MEETING. 7pm at First United Methodist Church, 1838 SW Jefferson St., Portland. Diana Reeck will talk on "Gardening with Native Plants".

Siskiyou

16 Jan., Thur.

MEETING. Changes in the alpine flora of the Eastern United States", by Peter Zika of the Bureau of Land Management. 7:30pm in Room 171, Science Bldg., Southern Oregon State College. For information, call David Kennedy (535-6383).

Umpqua Valley

16 Jan., Thur.

MEETING. Help plan the meetings and field trips for the coming year. Bring your ideas and slides. 7pm in Room 310 of the Douglas County Courthouse, Roseburg.

Willamette Valley

20 Jan., Mon.

MEETING. 7pm at First United Methodist Church, Room 225, 600 State St., Salem. Member's Melody night. Please bring 10-15 of your favorite wildflower slides or UFO's (unidentified flowering objects) to share with us. For more info., call Kathy Connelly (393-1834).

William Cusick

14 Jan., Tue.

MEETING. 7:30pm LaGrande City Hall, 1000 Adams, LaGrande. Mary Corp, Umatilla County Weed Supervisor, will present a slide show on weed control strategies in relation to sensitive native plants.

11 Feb., Tue.

MEETING. 7:30pm Forest and Range Sciences Lab, C Street and Geckler Lane, LaGrande. Two Cusick Chapter members will share their experiences with plants of the tropics. Marty Stein will talk about the ethnobotany of the Philippines and Kent Coe will present a program on plants in Botswana.

10 March, Tue.

MEETING. 7:30pm Forest and Range Science Lab, C Street and Geckler Lane, LaGrande. Presentation by Jim McIvor of the Forest and Range Sciences Lab entitled "Insect involvement in the life of *Lupinus caudatus*, Kellogg's lupine."

7 April, Tue.

MEETING. 7:30pm ESD office, 2100 Main St., Baker City. Charlie Johnson, Zone Ecologist, US Forest Service, Baker, will present a slide show on endemic plants of the Blue Mountains.

For more information call Bob Ottersberg, 963-4907.

WELCOMING OUR NEW MEMBERS....

We have 45 new members to report!

<u>Blue Mountain Chapter</u>	Kathleen Cheap John Day Fossil Beds National Monument Alice L. Miller Ruth M. Rouse Don Rydrych Patricia Tempinski
<u>Corvallis Chapter</u>	Stephen J. Ahearn Sue Danver Karen Finley M. Anne Fox Julie Kintzi Colleen Llewellyn
<u>Emerald Chapter</u>	Maureen Culligan Kent Fergusson
<u>High Desert Chapter</u>	Frank & Joanne Cleland Mary Ann & Jon Ebbs Allison Hannan Jody Meier John & Louise Morton
<u>North Coast Chapter</u>	John Gerke
<u>Portland Chapter</u>	Betsy Becker Dalice Bromfeld Jeremy Coate Miel R. Corbett Linda S. Craig Kay Dodge Lurh Jensen
<u>Siskiyou Chapter</u>	Heather Barnes Phyllis Gustafson Karen Verhaaren
<u>Umpqua Valley Chapter</u>	Jeanne Cureton
<u>Willamette Valley Chapter</u>	Diane E. Hall Emily Gladhart
<u>William Cusick Chapter</u>	Chuck & Joyce Coate Kent & Priscilla Coe Joanne Druist Lucinda Gurney Shelly & Steven Josephson Bob Ottersberg Verna C. Slane

NEW WILLIAM CUSICK CHAPTER OFFICERS

President:	Bob Ottersberg
Vice President:	Shelly Josephson
Treasurer:	Cindy Gurney
Conservation Chair:	Melanie Crocker

NEW CORVALLIS CHAPTER OFFICERS

President:	Duncan Thomas
Vice President:	Esther McEvoy
Treasurer:	Dan Luoma
Secretary:	Phil Hayes

STATE BOARD TO MEET JAN. 25TH

Ever wonder how the Native Plant Society of Oregon manages its diverse statewide activities? Your next chance to see our far-flung State Board organization in action is January 25th. All NPSO Board meetings are open to the public and members are encouraged to attend and participate. The meeting will be on the 3rd floor of the State Parks Building, 525 Trade St., Salem, on the corner of Trade & High. Bring a sack lunch; beverages and snacks will be supplied. Board members will be mailed an agenda, minutes, and map.

Please send agenda items to President Stephanie Schulz by Jan. 10th.

The voting members of the State Board of the NPSO include State Officers, the 11 Chapter Presidents, and the Directors of the organization. A quorum of the 22 current voting Board members is needed at each meeting to conduct business. Each Board Member (including the non-voting *ex-officio* members) has a report to make on the activities they direct or oversee, as do all state committee chairs. In an organization such as ours communications are essential in carrying out our purposes and in reaching our goals. Attendance by all Board members is needed to assure the clearest communications possible within our organization. If Board members or committee chairs cannot attend, they should either send a representative or submit a written report to the secretary before the meeting.

NATIVE PLANT SOCIETY OF OREGON POLICY STATEMENT ON REINTRODUCTION OF EXTIRPATED OR RARE PLANT SPECIES

The following was adapted by the Board on Jan. 27th, 1991. Prepared by Tom Kaye and Esther McEvoy

Plant species may become extirpated or so endangered in Oregon that establishment of new populations by artificial means is desirable or necessary to preserve the species. This policy statement addresses the issue of plant species reintroduction, and offers guidelines to those interested in establishing new rare plant populations in a responsible manner. It is intended for people involved in applied plant conservation and restoration ecology. This policy is **not** intended to encourage the reintroduction or establishment of new populations of all rare species, or artificial spread of rare plant seed on a casual basis, nor does it endorse creation of new populations to mitigate population losses or for commercial gain. At this time, reintroductions are appropriate in only a few cases. However, the need for reintroductions may increase in the future, and this document was drafted to anticipate that increase. A list of agencies and organizations that should be contacted before a project of this type is undertaken is provided after the following guidelines.

Reintroduction Guidelines

1. Is it really native?

Confirm through valid records (such as herbarium specimens, discussion in a published flora, etc.) that the plant does or did occur in Oregon before a reintroduction is attempted.

2. Documentation.

Document each reintroduction, and keep records regarding the seed or transplant source(s), and the subsequent fate of the new population(s). Publish this documentation in the *NPSO Bulletin* or other journal. These specific points should be documented:

- * Location and map of source material.
- * Location and map of reintroduction site.
- * Type of source material (seed, cutting, etc.)
- * Justification of particular reintroduction.
- * Monitoring plans and methods.
- * Cost of project.
- * Permits obtained.
- * Names of individual(s) and group(s) involved.

3. Site selection.

Reintroduce plants only into sites where the species was once known to occur, or into typical habitat within the documented range of the species. To avoid genetic contamination of a persisting population (such as one dormant in the soil or present at low density) confirm that the species to be reintroduced is actually absent from the proposed site.

4. Other rare organisms.

Do not displace or reduce populations of other rare organisms by reintroducing a species.

5. Source of plant materials.

The seed or transplant source should be as close to the reintroduction site as possible. All plant material for a reintroduced population should come from a broad sample of one population, unless genetic or other evidence suggests that collections from more than one population would be beneficial. Do not damage the population that supplies the source material.

6. Genetic variability.

If information regarding the genetic variability of naturally occurring populations of the species of concern is available, make every effort to mimic this variability in the reintroduced population.

7. Permits.

Obtain the necessary permits before working with legally protected species or on public lands. Request permits from the US Fish and Wildlife Service or the Oregon Department of Agriculture before working with species listed as threatened or endangered by those agencies. Also, request permits from the US Forest Service and the Bureau of Land Management before taking material of species listed by those agencies from land managed by them.

8. Last materials.

Plant materials (seeds, cuttings, transplants, etc.) from extremely rare species are of inestimable biological value. Do not commit the **last remaining materials** (e.g. last seeds in a seed bank) of a species to any single reintroduction project, in case the project fails and the species is lost.

* * * * *

It might be argued that to reintroduce species into native or restored habitats is to create artificial populations with little resemblance to natural ones. However, it is the position of the Native Plant Society of Oregon that if the choice is truly between extinction and reestablishment of an endangered species, our duty is to make every effort to ensure the survival of the species.

**ORGANIZATIONS AND AGENCIES TO CONTACT
PRIOR TO REINTRODUCTIONS:**

Bob Parenti
U.S. Fish and Wildlife Service
Boise Field Office
4696 Overland Road
Boise, ID 83705
(208) 334-1931

Cheryl McCaffrey
Oregon State Office
Bureau of Land Management
PO Box 2965
Portland OR 97208
(503) 280-7050

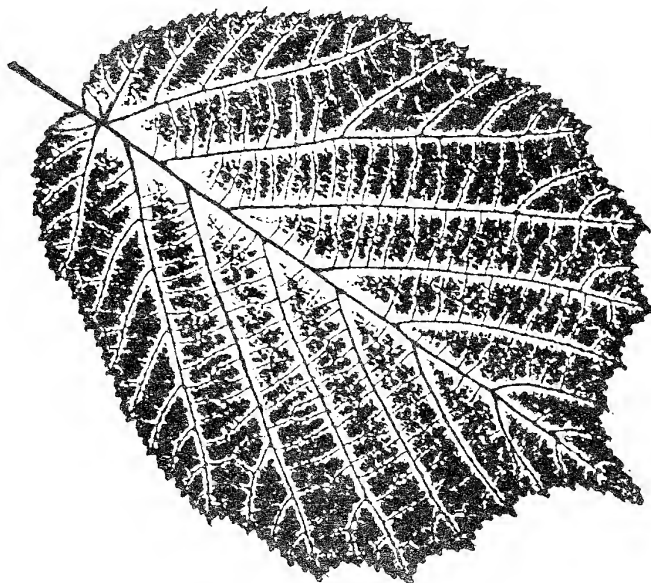
Dean Longrie
United States Forest Service, Region 6
PO Box 3623
Portland OR 97208-4091
(503) 326-4091

Bob Meinke
Plant Conservation Biology Program
Natural Resources Division
Oregon Department of Agriculture
Salem OR 97310
(503) 378-3810

Oregon Natural Heritage Database
1205 NW 25th Ave.
Portland OR 97210
(503) 229-5078

Ed Guerrant
Berry Botanic Garden
11505 SW Summerville Ave.
Portland OR 97219

President
Native Plant Society of Oregon
PO Box 902
Eugene, OR 97440
(503) 485-1868



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THE PLANT PUZZLE

Sponsored by the Siskiyou Chapter

Do you recognize this plant?
The first person to give the correct
scientific name will win a prize.
The illustrated leaves are from a
native woody species.

Send your guess on a postcard to:

Peter Zika
4230 NW Clubhouse Pl. #1
Corvallis, OR 97330

Rhoda Love of Eugene solved
the December puzzle: *Viburnum*
edule, moosewood viburnum,
highbush cranberry or squashberry.

GRAZING ISSUE RESPONSES

The grazing issue continues to be a hot topic for readers of the *Bulletin*. Following are more statements about the effects of grazing on our lands. We feel it is important to continue to air opinions and information on this subject.

The impact of grazing varies among the many vegetation associations that exist in the West. As a consequence observations and opinions vary also due to different realities in different plant communities. There may be specific plants or certain vegetation associations which have some adaption to grazing impacts, as well as the obvious many others which are damaged or destroyed by the same treatment. Management approaches must address the specifics of a site, and even though a certain approach may frequently be justified, there can be special circumstances connected with a certain plant or habitat type which may benefit from different than usual handling. See your November issue of the *Bulletin* for more.

PROTECTION OF NATIVE GRASSLANDS: A GRAZING POLICY FOR THE COLUMBIA RIVER GORGE NATIONAL SCENIC AREA

In the eastern half of the Columbia River Gorge National Scenic Area, the natural bunchgrass plant associations are *Agropyron spicatum* / *Poa sandbergii* (bluebunch wheatgrass/Sandberg's bluegrass) in the area from The Dalles eastward, and *Agropyron spicatum* / *Festuca idahoensis* (bluebunch wheatgrass/Idaho fescue) from The Dalles west to Hood River. After over a hundred years of livestock grazing these once magnificent perennial bunchgrass communities have largely been destroyed and replaced by introduced annual grasses, mainly *Bromus tectorum* (cheatgrass).

In Natural Vegetation of Oregon And Washington (USDA Forest Service General Technical Report PNW-8, 1973), Franklin and Dyrness write (p. 218): "Grazing most seriously affects the larger perennial grasses since they are preferred and are not adapted to withstand grazing. Heavy grazing tends...to eliminate *Agropyron spicatum*, *Festuca*

idahoensis, etc., and to increase annual grasses, particularly *Bromus tectorum*". On p. 232, "In most cases...the perennial grasses and forbs are increasingly replaced by *Bromus tectorum*, and there is little evidence that it will relinquish a site once occupied...The consequence of all this is that communities dominated by *Bromus tectorum* are a permanent and widespread feature of the landscape".

Since the loss of these late seral bunchgrass communities to grazing appears to be irreversible, we should direct our efforts toward protection of natural grasslands where they still exist. In the Columbia Gorge, there are scattered small stands of *Agropyron spicatum* and *Festuca idahoensis* which have been lightly or not at all grazed for a variety of reasons, such as accident of ownership, great distance from water, or the presence of difficult terrain, such as cliffs or talus slopes. These remnant bunchgrass communities are an important natural resource from the scientific, esthetic, and historical points of view. Where these surviving bunchgrasses occur on public lands, especially, they should be protected from all livestock grazing, since Franklin and Dyrness point out (p. 223) "...*Agropyron* decreases with grazing and *Bromus tectorum* increases...."

A second argument against grazing of the remnant bunchgrass stands is that cattle not only pave the way for cheatgrass, but also prepare the ground for invasion by noxious weeds such as diffuse knapweed and yellow star thistle. Both of these weeds are rapidly spreading on disturbed lands throughout the eastern Gorge.

Some might fear that cessation of grazing could lead to an increase in grass cover and corresponding decrease in wildflower populations. In the Gorge, at least, this fear does not appear to be justified. There are areas on both sides of the river which were long ago cut off from grazing by railroad and highway construction. Roughly a century after grazing ceased, these areas are still dominated by cheatgrass, but the wildflowers are abundant and diverse. Balsamroot, for example, is particularly abundant on these formerly grazed lands. Unlike bluebunch wheatgrass and Idaho fescue, balsamroot is able to recover and thrive after cessation of grazing.

In sum, since loss of the large native bunchgrasses to cheatgrass is probably irreversible, the remnants still existing in the National Scenic Area constitute a precious natural resource, which deserve full protection from any further grazing.

--Russ Jolley
Portland Chapter

**...WE MUST REALIZE THAT CATTLE
DISRUPTED THE NATIVE ECOSYSTEM
IN THE FIRST PLACE..."**

The pros and cons article about grazing on public lands was comprehensive and interesting.

Almost all the arguments for grazing or not grazing were advanced. I read all the statements, letters and opinions of those who support grazing and am not convinced by the arguments for "beneficial grazing".

First, we need to remember that for the thousands of years before cattle were introduced to the west, the forest and grasslands thrived and evolved into the marvelous ecosystems of nature that the white man found when he came. No one can prove that livestock grazing has made them better.

They may proclaim, as stated in "Overgrazing, Undergrazing and Grazing" that undergrazing or resting a pasture may make it a biological desert, or that eliminating grazing from Tilden Park caused encroachment of coyote brush and desertification of biodiversity, and invasion of exotic grasses, mustards and hemlock. However, we must realize that cattle disrupted the native ecosystem in the first place. They have extensively interfered with and altered the process of nature.

So damaged have been most of our public lands that livestock is perceived to be the best control for the noxious plants and weeds which are the only flora that remains. However, a few years of careful control and management can soon return the land, soil and wildlife to a wonderful, pregrazed wild condition. A very successful example of this is a 10,000 acre area of BLM land in Washington from which cattle have been excluded for fifteen years.

Using public land to raise beef and sheep for food is not essential as is illustrated by the figure that 98 percent of the cattle used for meat are produced on private pastures and feedlots. While withdrawing grazing allotments might cause temporary hardships for some ranchers, there are alternatives which they can work out....

I heartily endorse the statement of Mary Vogel: "NPSO should take a position of phasing all livestock off all public land".

--Roberta Bates
William Cusick Chapter

CONTACTING YOUR PUBLIC OFFICIALS

Wishing to make your views known to your elected representatives in Congress? Here are the numbers to write or call:

Write to Representatives Les Aucoin, Bob Smith, Ron Wyden, Peter DeFazio, and Mike Kopetski at:

The Honorable _____
US House of Representatives
Washington DC 20515
Phone them via the Congressional Switchboard at 202/224-3124.

Write to Senators Mark Hatfield and Bob Packwood at:

The Honorable _____
US Senate
Washington DC 20510
Phone them via the Congressional Switchboard at 202/224-3124.

Also:

President George Bush
The White House
1600 Pennsylvania Ave., NW
Washington DC, 20500
The White House Switchboard number is: 202/456-1414.

BITS AND PIECES

---NEWS AND INFORMATION FROM ALL OVER

JERRY FRANKLIN RETIRES FROM USFS

Jerry Franklin has retired as Chief Plant Ecologist with the Pacific Northwest Research Station of the Forest Service after 34 years with the agency. He is joining the University of Washington as a professor in the Institute of Environmental Studies.

Franklin has been a leader in the scientific effort to preserve our natural ecosystems. He twice received the USDA's Superior Service Award, in 1970 for "exceptionally productive forest research and leadership in developing cooperative relations with national and international agencies and educational institutions", and in 1987 for "leadership in forest ecology research and education leading to improved understanding of natural forest ecosystems". He received the George B. Fell Award from the Natural Areas Association in 1990, the first Olaus & Margaret Murie Award of the Wilderness Society for government employees exhibiting "exceptional dedication to the principles of natural resource conservation" in 1988, and served on a variety of boards, committees, and programs, often as director or chair. He worked with the Japanese government on subalpine forest management there. He also was visiting scholar, professor, or lecturer for several universities across the United States. He spent 11 years as US Leader for the Project on Biosphere Reserves implementing the US-USSR Bilateral Agreement on Environmental Protection.

He has made more than 500 presentations to scientific meetings and workshops with conservation, industry and academic groups. He spoke on "New Forestry" at the 1990 NPSO Annual Meeting. He co-authored the 1973 Natural Vegetation of Oregon and Washington, which was the first publication to gather together and build on the previously widely scattered research on Northwest forests and their ecology, and it set the tone for depth and quality for research in Northwest ecology since.

States PNW Station Director Charles Philpot: "Jerry's advocacy role in the study and preservation of natural ecosystems has set a precedent in the field not only regionally, but nationally. He showed us all that the basic understanding of natural ecosystems will be the key to the future."

BOTANICAL EXPLORATION OF THE TRANS-MISSISSIPPI WEST

This classic history of the botanical exploration of the West was first published in 1955 by the Arnold Arboretum of Harvard University. It has been out of print for several years and has fetched as much as \$350 on the rare book market. It was re-released in October by the Northwest Reprints section of Oregon State University Press on acid-free paper for \$85. This 1200 page edition includes author Susan McKelvey's entire original text, and 9 maps by Erwin Raisz from the original publication. It adds a new color map showing the routes of all journeys discussed in the text. It also includes a foreword and annotated bibliographic supplement by Joseph Ewan of the Missouri Botanical Garden and an introduction by Stephen Dow Beckham of Lewis and Clark College which discusses the importance of the book and recent research since its original publication, as well as providing further biographical information on Susan McKelvey.

This book is considered the definitive work on the life, labors, field work and publications of the many botanical explorers of the West from 1790 to 1850. It will continue to be an indispensable reference for natural and cultural history, early exploration, and botany.

Botanical Exploration of the Trans-Mississippi West can be ordered from Oregon State University Press, 101 Waldo Hall, Corvallis OR 97331-6407 (503/737-3166) at \$85 each, plus \$5 for postage, handling and mailing insurance for the first copy, and \$2 for each additional copy. Visa and Mastercard can be accepted by mail or phone.

FRIENDS OF IRON MOUNTAIN PEAKS MEETS

This group, which first met in November, would like more input from NPSO members. The Iron Mountain area, often the goal of NPSO field trips, is of special interest botanically. The next meeting is Jan. 14th at 7pm in the Alsea-Callapooia Rm., College Center Bldg. on the LBCC campus. For more information, call Bob Ross (928-2361).

PACIFIC YEW GETS ATTENTION FROM SEVERAL AGENCIES: EIS IN WORKS

Following pressure from environmentalists and Congress, several Federal agencies have announced a cooperative effort to write an Environmental Impact Statement concerning continued harvest of Pacific Yew (*Taxus brevifolia*). The Pacific Yew EIS Team will collect and analyze information on the short and long-term effects of a proposed five-year harvest program. Covering the Oregon, Washington, Idaho, Montana and California range of the yew, the study will look at the yew's ability to regenerate following harvest, its genetic diversity, and its place in the forest ecology. The Forest Service will be the lead agency, with the Bureau of Land Management, the US Food and Drug Administration, and the National Cancer Institute acting as cooperating agencies.

Concern over the yew began with discovery that it contains a chemically complex drug named taxol which has a 30 to 56 percent success rate in treating at least two hard-to-control types of cancer. Success is defined as shrinking tumors, not curing cancer. Artificial synthesis of the drug will be difficult due to its complexity. So little is produced by each tree that the possibility of running out of yews is a real threat. There is the potential of a head-on crash between the endangered species act and the needs of research and several hundred thousand cancer patients each year.

Rep. Ron Wyden (D-Ore.) and Rep. Gerry Studds (D-Mass.) have submitted legislation to Congress intended to ensure efficient harvest of yew bark. Wyden commented about the bill that "What this is, is a very late effort to do what should have been done months and months ago. The yew tree may be the most valuable tree in the forest, and the natural resources agencies have been running the program by the seat of their pants".

The Forest Service is inventorying Pacific yew west of the Cascades, the yew's best habitat. This study is due out in mid-January. The BLM plans to begin a study next year, as well as try to figure out how much has already been stolen. About 890,000 pounds of yew bark has been legally collected this year on Forest Service and BLM land.

The Pacific Yew EIS Team will first meet in January. Their address is 333 SW 1st Ave. (PO Box 3623) Portland OR 97208. Those who wish to comment on the upcoming EIS should contact Susan Whitney of the Forest Service at (503) 326-7733.

CRATER LAKE NATIONAL PARK: STILL BEAUTIFUL AT 90

This symposium will commemorate the 90th Anniversary of the founding of Crater Lake National Park. The National Park Service, Crater Lake Natural History Association, and Southern Oregon State College are cooperating to stage a three-day presentation of research papers, interpretive displays, and field trips, all on the subject of Crater Lake. The dates are May 15th-17th, 1992, at Southern Oregon State College in Ashland.

A call for papers has been issued by Dr. Frank Lang. Proposals should be submitted by January 15th, 1992. Presentations are planned to be 15-20 minutes each. Any topic related to Crater Lake and the park will be considered. The proceedings may be published. Send proposals to:

Dr. Frank Lang
Department of Biology
Southern Oregon State College
Ashland, OR 97520
(503) 552-6342
For registration information, contact 'Crater Lake Symposium' at the same address.

PRIMULA WORLDWIDE: AN INTERNATIONAL SYMPOSIUM

Five years in the planning, this symposium celebrating the diversity and heritage of the genus *Primula* is timed to honor the American Primrose Society on its 50th anniversary. It is being sponsored by the American Primrose Society, The Royal Horticultural Society of England, and Berry Botanic Garden, along with nine co-sponsoring groups. Speakers are coming from the British Isles, Canada, Japan and the United States. The audio-visual presentations will tour *Primula* habitat worldwide. Garden tours, exhibits, a primrose show, plant and book sales, and study clinics are included.

The site of the Symposium will be the Greenwood Inn in Beaverton, west of Portland. The dates are April 10th-12th.

For more information, contact:
Ann Lunn, Registrar
6620 NW 271st Ave.
Hillsboro, OR 97124
(503) 640-4582

STATE OFFICERS

DIRECTORS John Christy, Bill Hopkins, Tom Kaye, Warren Pavlat, Kathy Schutt, Carolyn Wright
 PRESIDENT..... Stephanie Schulz..... 652 W. 10th St. #1, Eugene 97402; 485-1868
 IMMEDIATE PAST PRESIDENT... Stu Garrett..... 21663 Paloma Drive, Bend 97701; 389-6981
 VICE PRESIDENT..... Dan Luoma..... 2912 NW Arthur Ave., Corvallis 97330; 758-8063
 SECRETARY..... Sue Vrilakas..... 1120 NE 162nd, Portland 97230; 253-7080
 TREASURER..... Diane English..... 3383 W. 14th, Eugene 97402; 484-9287

STATE COMMITTEE CHAIRS

RARE AND ENDANGERED Jimmy Kagan..... 1724 SE 57th Ave., Portland 97215; H-233-1048; W-229-5078
 CONSERVATION, East Side .. Stu Garrett..... 21663 Paloma Drive, Bend 97701; 389-6981
 CONSERVATION, West Side... Kate Dwire..... 33787 SE White Oak Rd., Corvallis 97333; h-757-7115; w-757-4666
 LEGISLATIVE Esther McEvoy..... 3290 Willamette, Corvallis 97333; 754-0893
 MEMBERSHIP Jan Dobak..... 2584 NW Savier St., Portland 97210; 248-9242
 WILDFLOWER POSTERS Jennifer Dimling..... PO Box 920, Eugene 97402; 343-3242
 NOTECARDS..... Nancy Fredricks..... Box 127, North Bonneville, WA 98639; (509)-427-8778

CHAPTER PRESIDENTS

BLUE MOUNTAIN (Pendleton). Jerry Baker..... Rt. 1, Box 263, Adams, 97810-9704; 566-2244
 CORVALLIS Duncan Thomas..... 7310 NW Acorn Ridge Dr., Corvallis, 97330-2701; 752-6529
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GUIDELINES FOR CONTRIBUTORS

The NPSO *Bulletin* is published monthly as a service to NPSO members and the public. Contributions of all types are welcome.

DEADLINE Copy is due with the editor by the 10th of each month.

Text Format: Submissions can be in any form. Camera-ready copy should be in 3.334 in. wide columns up to 9.3 in. long, with .22 in column spacing. The *Bulletin* uses 12pt. 'Times' font. Author's name and affiliation are added at the end of the article. Do not indent but double space between paragraphs. For special materials (e.g., plant keys) choose an appropriate format, keeping in mind that readers may wish to carry your article pasted inside their favorite field guide.

Computer output: The editor prefers articles submitted on Macintosh or IBM disks, or via Macintosh modem. Contact the editor for details.

Illustrations: Line drawings, prints, and high contrast B&W prints are useable. Some Macintosh graphics can be used also. Contact the editor about our current needs, or send them along with your article.
Credits: If the item is not original, name and date the source. For original items, identify the author and indicate, for news items, if a by-line is desired. Indicate whether the item is to be used in its entirety or excerpted at the editor's discretion.

Scientific Names: Nomenclature should follow *Flora of the Pacific Northwest* by Hitchcock et al., when appropriate. Use both scientific and common names if possible. *Italicize* genus and species (underline if italic is not available).

Return of Originals: Submissions are not returned unless requested.

Membership in the Native Plant Society of Oregon is open to all.

Membership applications, renewals, and changes of address (include old address and zip code) should be sent to the Membership Chair.

NATIVE PLANT SOCIETY OF OREGON MEMBERSHIP FORM

Name _____

Chapter (if known) _____

Address _____

Is this a change of address?

If so, please write your *Old Address* here:

City _____ State _____ Zip+4 _____ - _____

Phone (Home) _____ (Work) _____

City _____ State _____ Zip _____

* **DUES** include monthly NPSO *Bulletin*. Full membership is for a calendar year, January through December. New memberships enrolled during September through December are charged a reduced "Quarter Membership" rate.

() New	() Renewal	() Quarter Membership (Sep.-Dec.)	\$3.00	() <i>Bulletin</i> Subscription only	\$12.00
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Jan Dobak, NPSO Membership Chair, 2584 NW Savier St., Portland OR 97210-2412.

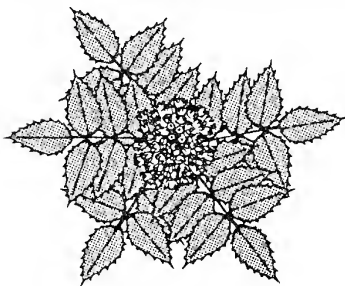
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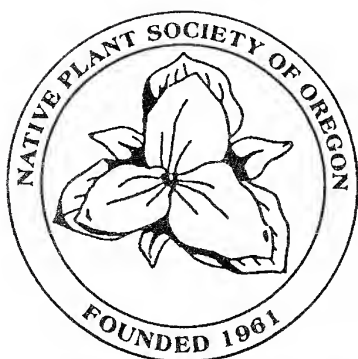
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**NATIVE PLANT SOCIETY
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of Oregon's native vegetation

VOLUME 25 NUMBER 2

FEBRUARY 1992

ISSN 0884-599

CHAPTER NEWS

IMPORTANT NOTE TO FIELD TRIP PARTICIPANTS:

Field trips take place rain or shine, so proper dress and footwear are essential. Trips may be strenuous and/or hazardous. Please contact the trip leader for information about difficulty, mileage, and terrain. Participation is at your own risk. Bring water and lunch. All NPSO activities are open to the public at no charge (other than carpool mileage), and friends, newcomers and visitors are always welcome.

Notice to field trip chairs and leaders: The Forest Service and other Federal agencies have set policies limiting group size in wilderness areas to 12. The reason for this is to limit the human impact on these fragile areas. Each group using wilderness must be no larger than 12.

Blue Mountain

For information, contact Jerry Baker (566-2244).

Corvallis

PLEASE NOTE: THE CORVALLIS CHAPTER NOW MEETS ON THE 2ND TUESDAY OF THE MONTH, RATHER THAN ON MONDAYS.

11 Feb., Tues.

MEETING. 7:30pm in the Corl House, 3975 NW Witham Hill Rd., Corvallis. Jim Weber will talk on "Botanical Similarities between the Pacific Northwest and the Upper Great Lakes". Jim will discuss present day distributions in the light of changes in distribution patterns during the Holocene. Contact Duncan Thomas (752-6529) for further information.

22 Feb., Sat.

WORKSHOP. "Winter Plant Propagation"--Work with hardwood cuttings and seed dormancy. 1 to 3pm at Loren Russel's house 3420 SW Willamette, Corvallis. If interested in attending call Loren at 752-7558.

Emerald

10 Feb., Mon.

MEETING. 7:30pm in the Library, Kennedy Middle School, 2200 Bailey Hill Road, Eugene. Dr. Daphne Stone, an expert on lichens, mosses and liverworts, will show slides and speak on: "The Ecology of Lichens and Some Interesting Lichens of Alaska, Oregon, California and Georgia." Dr. Stone's new brochure, Lichens and Mosses of Mount Pisgah Arboretum, will be available. For more information, call Jenny Dimling (343-3242).

15 Feb., Sat.

FIELD TRIP: Daphne Stone will lead a short walk to view some of the common mosses, lichens and liverworts of Mt. Pisgah Arboretum as a follow up to her talk of Feb. 10th. Her new brochure, Lichens and Mosses of Mount Pisgah Arboretum, will be available. Meet at the Mt. Pisgah Arboretum office at 10am. Lunch and drink optional as this walk will be completed by noon. For more information, call Daphne at 344-3274.

- 15 Feb., Sat. **WILLOW CREEK WORK PARTY.** Volunteers needed for a morning of woody plant removal at TNC's Willow Creek Reserve in west Eugene. Meet at 9:30 am at the bridge over Willow Creek on West 18th, 1/2 mile west of Bertelsen Rd. Bring work gloves, loppers or hand saw. For more information, call Ed Alverson, 687-5586.
- 9 March, Mon. **MEETING.** 7:30pm in the Library, Kennedy Middle School, 2200 Bailey Hill Road, Eugene. Ellen Deehan Clark, Lane Community College Botanist, will show slides and speak on "Belize: Mayan Jungle and Coral Reef." Ms. Clark will discuss her recent explorations of the rain forest jungle and the shoreline of this Central American country on the Caribbean. For more information, call Jenny Dimling, 343-3242.

High Desert

- 25 Feb., Tues. **MEETING.** 7:30pm at The Bend Senior Center on NE Marshall. The High Desert Chapter will have their annual "Share-a-Slide" show. Bring up to 10 of your favorite recent shots and share them with us!

Mid-Columbia

- 5 Feb., Wed. **MEETING.** 7:30pm at the Mosier School. Mike Fahey will present a program on Seeds of Columbia Gorge Native Plants.
- 4 March, Wed. **MEETING.** 7:30pm at the Old West Gallery, upstairs above Mel'o's Camera Shop, 312 East 2nd St., The Dalles. Use Alley entrance and park in Coast to Coast lot from 3rd St. Professional photographer Wilma Roberts, FPSA, will present a creative impression of wildflowers titled "Along Nature's Path".

North Coast

>>>

FIELD TRIP. Date and location to be announced. For more info., call Jim Winslow (842-2246).

- 25 Feb., Tues. **MEETING.** 7pm at Tillamook PUD Meeting Room, 1115 Pacific, Tillamook. Program to be announced.

Portland

- 11 Feb., Tues. **MEETING.** 7pm at First United Methodist Church, 1838 SW Jefferson St., Portland. Linda Hardie-Scott will speak on "Wildflowers of the Deserts of Southern California".
- 8 Feb., Sat. **WORKSHOP.** Dean Longrie, Regional Botanist for the USFS Pacific Northwest Region will provide a program on the "Botany Programs in the Pacific Northwest National Forests". The workshop will be held in Room 201, First United Methodist Church, 1838 SW Jefferson St., Portland at 10am.
- 22 Feb., Sat. **WORKSHOP.** Molly Sullivan, botanist for the Columbia River Gorge District of the Mt. Hood National Forest, will present a workshop on clubmosses. She will also describe techniques used in searching for and monitoring rare plants. The workshop will be held in Room 201, First United Methodist Church, 1838 SW Jefferson St., Portland at 10am.
- 7, 14, 21, & 28 Mar., Sat. **WORKSHOPS AND FIELD TRIP.** Jerry Igo of the Mid-Columbia Chapter of the NPSO will present a series of three workshops and a field trip on four successive Saturdays in March. The workshops will cover wildflower identification with emphasis on flowers of the Columbia River Gorge. Jerry will lead a field trip on the last Saturday of March to show many of the flowers discussed in the classes. The classes will be from 10am to noon. They will be held at the Leach Botanical Garden Manor House, located at 6704 SE 122nd Ave., Portland. These classes are jointly sponsored by the Portland Chapter of the NPSO and the Leach Botanical Garden. Jerry Igo is a well-known naturalist with a broad background in native plants.

Siskiyou

- 20 Feb., Thur. **MEETING.** 7:30pm in Room 171, Science Bldg., Southern Oregon State College. Dr. Ed Guerrant of the Berry Botanic Garden in Portland will describe his research work on isozymes in a lecture titled "Should *Fritillaria gentneri* be considered a good species?" For information, call David Kennedy (535-6383).

10 Feb. to 28 Feb.

Art Exhibition. "Endangered Flora of the Siskiyou". Paintings by James Hutchinson on display at the Other Art Gallery at SOSOC.

Umpqua Valley

13 Feb., Thur.

MEETING. Russ Holmes, BLM botanist, will discuss opportunities for volunteer summer projects. 7pm in Room 311 of the Douglas County Courthouse, Roseburg.

22 Feb., Sat.

FIELD TRIP. Key the gymnosperms in Stewart Park, Veterans Administration grounds and adjacent territory. It will take a half-day's stroll to cover them all. Bring a lunch and if the weather is nice we can go afield to look at native broadleaf trees. Meet 8am BLM parking lot, 777 Garden Valley Rd, Roseburg.

Willamette Valley

17 Feb., Mon.

MEETING. 7pm at First United Methodist Church, Room 225, 600 State St., Salem. Susan Wilcox will speak about Berry Botanic Garden (in the Portland-Lake Oswego area) with special emphasis on native plants within its collection. For more info., call Kathy Connelly (393-1834).

William Cusick

11 Feb., Tue.

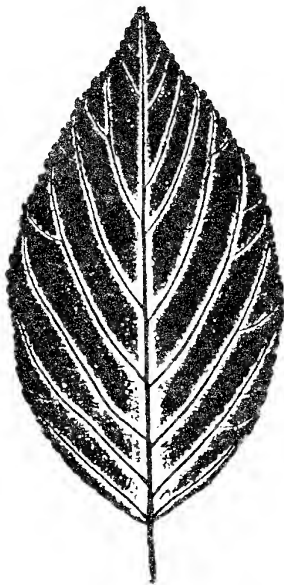
MEETING. 7:30pm Forest and Range Sciences Lab, C Street and Geckler Lane, LaGrande. Two Cusick Chapter members will share their experiences with plants of the tropics. Marty Stein will talk about the ethnobotany of the Philippines and Kent Coe will present a program on plants in Botswana.

10 March, Tue.

MEETING. 7:30pm Forest and Range Science Lab, C Street and Geckler Lane, LaGrande. Presentation by Jim McIvor of the Forest and Range Sciences Lab entitled "Insect involvement in the life of *Lupinus caudatus*, Kellogg's lupine."

7 April, Tue.

MEETING. 7:30pm ESD office, 2100 Main St., Baker City. Charlie Johnson, Zone Ecologist, US Forest Service, Baker, will present a slide show on endemic plants of the Blue Mountains. For more information call Bob Ottersberg, 963-4907.



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cm

THE PLANT PUZZLE

Sponsored by the Siskiyou Chapter

Do you recognize this plant?
The first person to give the correct scientific name will win a prize. The illustrated leaves are from a native woody species.

Send your guess on a postcard to:

Peter Zika
4230 NW Clubhouse Pl. #1
Corvallis, OR 97330

Rhoda Love of Eugene solved the January puzzle: *Corylus cornuta* var. *californica*, hazelnut or filbert.

HAVE YOU EVER HEARD OF *PAXISTIMA*?

Since early in this century, botanical taxonomists have operated under a well defined set of rules (the International Code of Botanical Nomenclature) which is designed, among other things, to stabilize the spelling of the generic names of plants. In an ideally perfect world, we might by now have applied these rules evenly to all genera, eliminating the annoying variations in spelling which I have discussed in some earlier articles in this *Bulletin*. Given the tremendous volume of botanical literature worldwide, however, which must be accounted for all the way back to 1753 (the date of Linnaeus' *Species Plantarum*), no wonder some "technically incorrect" generic names are still in common use.

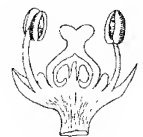
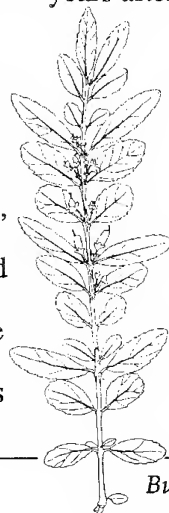
If you don't recognize the name *Paxistima*, it is because this spelling is the correct version of one you are probably familiar with: *Pachistima* (whose common names include mountain-box, myrtle-boxwood, and Oregon-boxwood). The correctness of the former spelling is strictly determined by the rules of nomenclature, and the problem supposedly was laid to rest as long ago as 1949. Unfortunately, *Pachistima* has continued to be used in so many authoritative reference books that I and many other taxonomists have been unaware that there was any question about its spelling. Having recently been alerted to this problem, I will explain how it happened and urge that in the future we all adopt the correct spelling.

The difficulties began in 1818, in the publications of a most eccentric early American naturalist, Constantine Rafinesque (1783-1840). A man of bizarre genius whose work was mostly scorned by his contemporaries, Rafinesque proposed an overwhelming number of "new genera and species" of plants in more than 1000 publications; his new generic names alone total over 2700. His work was so erratic, however, that botanists of the time could make little sense of it; some believed him mildly insane. To give you an impression of his approach, imagine a person perpetually running up hill and down dale, pointing excitedly at plants, mammals, reptiles, birds, fish, and mollusks, shouting "...this one's new, and that one's new, and that one's new...I'll give it this name, that name, and that name...!!" Not until 1949 was a complete index made to the plant names proposed by Rafinesque, and much of his bibliography consists of extremely rare publications available in only a

few botanical libraries. The matter of *Paxistima* versus *Pachistima* was explained in this index (but even the index contained a typographic error which added to the problem!). As published in 1818, the name *Pachistima* was accompanied by no generic description; it was what taxonomists call a "naked name" which cannot be used (the International Code of Botanical Nomenclature defines such names as "illegitimate"). However, in a much later publication (1838) Rafinesque mentioned this genus again, and at that point he did give an adequate Latin description--but remarkably, he changed the spelling to *Paxistima*! It was typical of Rafinesque to be rather cavalier in the spelling of his proposed names; he apparently felt free to change his mind at will, probably on the theory that, since he was the describer and namer of each plant, it was his right to call it whatever he wished. To add further to the comedy of errors, the Rafinesque index referred to above gives, on a different page, still another spelling--*Paxistema*--which is simply a misprint. In summary, *Paxistima* of Rafinesque is a legitimately published name, dating from 1838, which has been accepted by nearly all subsequent botanists but given the illegitimate 1818 spelling, *Pachistima*.

The usual interpretation of the classical derivation of this name is that it was composed from the Greek words for "thick" and "stigma" (in which case "*pachystigma*" would be a better spelling). Another Rafinesque eccentricity was that he liked plant names short, and therefore he often deleted letters or syllables when making compounds from classical Greek and Latin words. Rafinesque, that intriguing figure from early 19th Century science, continues to baffle us even now, more than 150 years after his death.

--Ken Chambers
Corvallis Chapter



Paxistima myrsinites
from Theodor Loesener in
"Die Natürlichen Pflanzenfamilien," 1942.

NPSO '92 ANNUAL MEETING: MALHEUR FIELD STATION

Mark your calendars! The High Desert Chapter (Bend) will host this year's NPSO annual meeting Friday, Saturday and Sunday June 5th-7th at Malheur Field Station. Plan to arrive at the Station by Friday night, so you will be fresh for Saturday's field trips. Driving time from Portland is about 7 hours, from Bend 3 1/2 hours. Saturday night's Annual Meeting and banquet will feature awards by NPSO President Stephanie Schulz and a fascinating slide presentation by expert ethnobotanist Lucille Housley, director of the Field Station. The quarterly Board meeting is Sunday for those wishing to attend.

Don't miss this year's Annual Meeting!!!!

Saturday's Field Trips

The Narrows ACEC/*Stephanomeria* enclosure

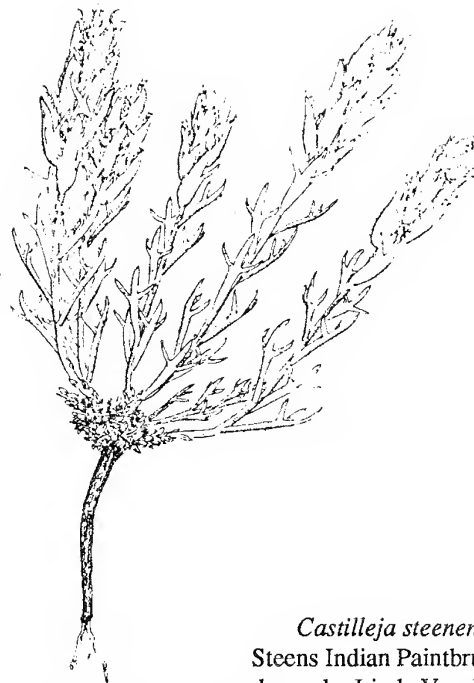
This site contains the only known location for one of Oregon's three federally listed endangered plants, the Malheur wirelettuce. We will hopefully be able to see this annual in bloom, learn of the recovery plans by BLM/USFWS, and survey for new plants. This spot is a 15 minute drive from the Station and walking will be easy. Leader: Nora Taylor, BLM.

Botanizing and Birding the Refuge

The Malheur National Wildlife Refuge is one of the best birding spots in the nation. Accomplished natural historians, Dick and Marge Ettinger, will share some of their favorite birding areas and look at some of Malheur's native marsh vegetation on this trip down the Center Patrol Road. A nice mix of driving and easy walking.

A Different Approach to Ranching

The Fred Otley family has agreed to show us their approach to current ranch management. We will see how juniper control, prescribed fire, rotation grazing, and riparian protection are utilized by this ranching family with early roots in Harney County. A combination of moderate hiking and driving. Leader will be Stu Garrett.



Castilleja steenensis
Steens Indian Paintbrush
drawn by Linda Vorobik

from Threatened & Endangered Vascular plants of Oregon

Ponderosa Pine Ancient Forests

USFS ecologist Bill Hopkins will take us to the southernmost Blue Mountains to see and discuss the ecology of the remnant stands of Oregon's yellow-bellied pine forests. Driving time is 1 1/2 hours one-way and hiking is 2-4 miles.

Great Basin/Paiute Ethnobotany

Ethnobotanist Lucille Housley will lead us to the Stinkingwater Pass area where traditional native American uses of local plants will be discussed. A 2 hour one-way drive with moderate hiking of 2-4 miles.

Riddle Ranch/Rooster Comb RNA

This area on the Little Blitzen River has recently been acquired by the BLM. There is much history and good botanizing in this area. This ranch is located on the lower slopes of magnificent Steens Mountain. Probable leaders will be BLM personnel.

Marsh Recovery

Botanist Sherry Spencer of PSU has been studying the recovery of lowlands from the flooding of the 1980's. Join her to see how the receding floodwaters are permitting revegetation on the refuge. A short drive with moderate walking. (This field trip is not yet confirmed.)

OREGON'S WETLANDS

Loss of wetlands is a major environmental concern nationwide, statewide, and locally. Different sources estimate that Oregon has lost between 38 and 50% of its wetlands since "settlement", primarily due to diking (coastal, estuarine, and valley) and draining for agricultural land use. The loss and degradation of wetlands has slowed somewhat in recent years due to protective state and federal regulations; however, Oregon's wetlands continue to be impacted by development pressure, grazing, and farming.

Efforts to protect Oregon's wetlands are occurring at different scales. The Nature Conservancy is working with federal, state, and local agencies to preserve biologically significant wetlands. John Christy (wetlands biologist, Oregon Natural Heritage Program) is conducting an inventory of wetlands west of the Cascades, seeking those that are intact and functional enough to be viable wetland systems. John's field work has revealed some interesting wetland remnants that he will continue to study for preservation/conservation potential.

The fate of one Willamette Valley wetland, Lake Labish, was the topic of John's presentation at the October Corvallis chapter meeting. Lake Labish, once an expansive wetland near Salem, was drained and partially converted to onion fields in the 1920s and 30s. John described his study of soil maps and search through records--botanical and historical--to delineate the past expanse of Lake Labish. This story is fairly typical of Willamette Valley wetlands. John noted that the few high quality wetlands remaining in the Willamette Valley area are located in the upper parts of watersheds, where conversion to agricultural land use has been more difficult.

At local levels, community awareness about local wetlands is gradually increasing. The "Mid-Valley Wetlands Workshop", organized by citizens concerned about wetlands in Linn and Benton Counties, was held in Corvallis on Oct. 12. The workshop served as a forum to inform both local politicians about the concern for local wetlands, and landowners, who are affected and frustrated by the complex permitting process, helping both to be involved in wetland conservation. At this workshop, Ed Alverson (ecologist, Nature Conservancy) described the natural history of Willamette Valley wetlands with an informative

slide presentation, noting the rare plant species that occur in different types of local wetlands. Reed Noss (conservation biologist, private consultant) discussed wetlands as "biological corridors" and the importance of watershed protection to maintenance of biodiversity. Local officials explained the role of state and county governments in wetland planning. Presentations were followed by two separate discussion groups. Since most Willamette Valley wetlands are on private land, involvement of landowners is critical to wetland protection. This meeting spawned much interest. Follow-up activities, including organization of another workshop, are underway.

"Wetlands Under Siege" was the title of an informative meeting held in Portland on Nov. 16. The major topics were wetland delineation, and how proposed changes in the EPA delineation manual could change wetland protection. Organized by The Wetlands Conservancy, a Portland-based citizens' group, the well attended gathering featured speakers (from US Fish and Wildlife Service, Oregon Division of State Lands, and environmental consulting firms), a panel discussion, and a field trip (very wet) to compare the 1987 manual and the proposed delineation manual. Speakers urged participants to submit comments on the proposed changes in the national wetlands delineation manual, and to become involved in developing local Wetlands Conservation Plans.

Much of Federal wetland regulation is based on the Clean Water Act (Section 404). In the last year, 4 major wetland bills have been introduced in Congress, all of which would weaken wetland protection under the Clean Water Act. Several bills are being drafted. Conservationists look forward to a bill we can endorse (instead of opposing all the time). Several state laws provide protection for certain types of wetlands. Oregon policy concerning wetlands was established in Senate Bill 3 (1989), which contains authorization for the development of local Wetland Conservation Plans. The implementation of all legislation depends on wetland definition, which is why the Delineation Manual is such an important issue.

On behalf of NPSO, I submitted comments on the proposed changes to the manual, and wrote in opposition to pending federal legislation (HR1330, HR404). I will continue to follow proposed wetlands legislation. Please contact me if you would like more information regarding protection of Oregon's wetlands.

--Kate Dwire
Westside Conservation Chair

CALIFORNIA NATIVE PLANT SOCIETY SETTLES SUIT OVER NON-LISTING OF ENDANGERED PLANTS

The following article, abridged from Vol. 22, No. 1 of the Bulletin of the California Native Plant Society, relates the experiences of the California group in suing over non-listing of endangered plant species. It is reprinted here to provide background information that may relate to our own petition with the US Fish & Wildlife Service to list 7 Oregon Endangered plant species. See p. 144 in the Dec. 1991 NPSO Bulletin for information on our petition.

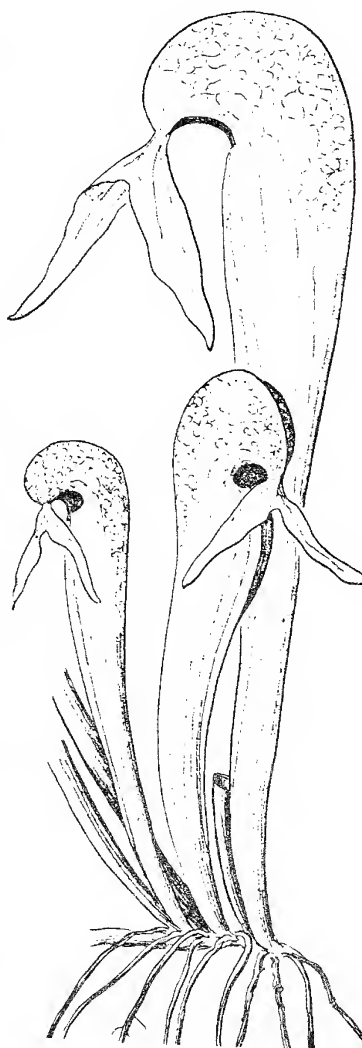
In a major victory for California's endangered plants, CNPS has settled its suit against the US Fish and Wildlife Service (FWS) over non-listing of Federal Category 1 candidates. The settlement provides for the Federal listing of all 159 category 1 candidates (in California) within the next 4 1/2 years, or by March 31, 1996. Prior to this lawsuit, FWS had listed a total of 33 plants species in the 17 years since the enactment of the Endangered Species Act. At that rate, listing of the Category 1 candidates would have taken nearly 80 years. Since nearly half of the Category 1 candidates nationwide are found in California, this suit makes significant progress in addressing a nationwide problem of rare plant decline.

Although the judge ruled in CNPS's favor in the suit and awarded costs and attorney fees to CNPS, the settlement emphasizes the spirit of cooperation that exists between CNPS and FWS regarding eventual listing of these vulnerable plants, and facilitates this cooperation through annual meetings between FWS and the interested public.

On November 6th, CNPS representatives attended the first of the annual meetings to evaluate FWS's listing progress. In 1990 and 1991 the Service proposed 12 plant species of vernal pools and coastal dunes for listing. In addition listing packages are completed for 18 coastal, vernal pool, and San Bernardino Co. limestone plants. The settlement agreement specified 25 new listings of C1s by the end of 1991 and only 22 of the 30 mentioned above are C1s, so in 1992 FWS proposes to list 3 taxa in addition to the 30 specified by the agreement. For 1992, FWS proposed the following six listing packages based on threats and geography. The basic packages are acceptable, and we are very pleased that FWS is responding promptly and professionally to our suit.

Both CNPS and FWS agree that vulnerability to extinction is greater for some Category 2 plants and non-candidates than for the 159 Category 1s addressed in the suit, and both parties would prefer the most endangered plants to be listed first. The matter has now been turned over to attorneys for both sides to agree on the substance, format, and mechanism for modifying the agreement to permit more listing flexibility.

The Rare Plant Program has assumed the lead coordination role in CNPS's efforts to assist the FWS in meeting the listing goals specified in the suit. Among other activities, CNPS plans to influence Congress to appropriate funds for essential listing staff as requested by the two California Field Offices, lobby FWS Director John F. Turner for critical flexible funds to support listing, and help FWS prepare listing packages.



Darlingtonia californica
drawn by Jeanne R. Janish
From Hitchcock & Cronquist's
Flora of the Pacific Northwest

RARE PLANT FIELD REPORT
CORDYLANTHUS MARITIMUS
spp. *PALUSTRIS*

Ahh, summertime on the Oregon coast! What could be more beautiful? Nature's perfect blending of rough rocky intertidal zones and smooth sandy shores, both areas abundant with life. I have always been amazed by the variety of fauna and flora present in coastal ecosystems. Thanks to Rhoda Love, Tom Kaye, the Native Plant Society of Oregon, and the Oregon Department of Agriculture (ODA), I was recently able to explore and study two of Oregon's coastal salt marshes.

I am currently a science major at Eugene's Lane Community College, and intend to transfer to Oregon State University and major in botany. When Rhoda mentioned to me last winter that the NPSO and ODA were seeking interested individuals to participate in botanical internships, and I discovered that one of the internships was to be located on the Oregon coast, I immediately applied.

Imagine my joy when I received a letter from Bob Meinke congratulating me on my selection. This valuable field experience in my intended field of study would mean a week on the coast. I was to work with Tom Kaye of the ODA's Natural Resources Division on an ODA-Bureau of Land Management (BLM) cooperative project establishing long-term monitoring plots for populations of *Cordylanthus maritimus* ssp. *palustris*, the salt marsh birds-beak. This species is a candidate for both state and Federal endangered species listing, and my week would be spent in furthering the study of several plant populations.

I set out on August 1st with Tom Kaye and ODA staffer Sarah Brady in our State of Oregon shiny white, 12 miles to the gallon, 4-door pickup truck, which we headed west. Most of the first day was spent driving and getting set up at the University of Oregon's Institute of Marine Biology (OIMB), and in a meeting with the BLM, Coos Bay District. I should mention at this point how helpful the Coos Bay District BLM and specifically Dennis Phillips (the district botanist) were. Without their help, our work would have gone quite a bit slower. After the BLM meeting, Tom took Sarah and me out and introduced us to *C. maritimus* and its habitat, and finally we returned to OIMB to prepare for the next day's work.

Now I knew that as happy as I was to be on the coast and as easy as the work we were going to do sounded, there would be a catch. Unfortunately, that catch came when Tom awakened me at 6:30 am. Not being a morning person, I was quite dazed. But after one soggy waffle, three cups of coffee, and a banana, I finally woke up and we began the day.

We started our work on the south end of the North Spit of Coos Bay. This is a sand pit owned by many different land owners, including the BLM, and is subject to many uses. After we had passed the pulp and paper mills and the sanitary waste treatment ponds, we were treated to the most obnoxious sight and sound I believe I had seen in quite some time. Hundreds and quite possibly thousands of people were tearing around on these beautiful sand dunes on their off-road vehicles (ORV's), blazing across dunes and salt marshes as if they owned them; their two, three and four-wheeled vehicles creating sounds almost as pleasing to the ears as shoes that are four sizes too small are to the feet. Here was the real problem.

We found *maritimus* populations that had been mapped previously. This short figwort family member seemed to be everywhere within a certain part of the salt marsh ecosystem---except in the wheel tracks of ORVs. We noted an odd coloring in some of the plants (yellow spots on the white petals rather than the usual purple). Tom speculated that in this area a simple gene mutation had occurred so the yellow was no longer masked by the plant's normal purple coloring. He pointed out that not only were the spots on the petals not purple, but on those plants all trace of purple was absent. The North Spit population is the only known group to contain yellow-flowered plants.

After doing a simple walking survey of the area, we began to record actual data. We first set up several carefully placed permanent transects that would allow Tom and the BLM to monitor the movement of these threatened annuals around the spit for many years to come. We set to work counting the number of *C. maritimus* plants within meter squares along our transects, noting the presence/absence of related species and whether or not the area was disturbed by man. This part of the job became quite time-consuming---happily because there were so many *C. maritimus* plants to count. We took most of two whole days to record all the necessary data from the North Spit. Toward the end of the second day on the North Spit, we called it quits so we could set up a monitoring transect at the University of Oregon's

Metcalf Marsh in Charleston. This somewhat pristine area had a sizable population and we set up a permanent monitoring site so that ambitious university students could help with the effort to protect this plant from extinction.

By the end of the third day, two things had become obvious to me. First, the *Cordylanthus* did not grow in areas that ORVs had passed over. You could see thick patches of the plant broken up by wheel ruts almost everywhere you turned. Second, some ORV drivers were not aware of the fragility of the salt marsh ecosystem that they enjoyed. This could be inferred by noting the large number of ruts crisscrossing the salt marsh.

On the fourth day, we had the opportunity to set up a transect in a pristine salt marsh habitat (thanks to Dennis). He took us and our equipment across the bay in his boat to a small dredge island where two *Cordylanthus* plants had been observed in 1990. Imagine our surprise when we found literally thousands of undisturbed plants thriving in their ORV and pollution free environment. On this dredge island, I was first able to completely see the stages of salt marsh succession, from only small patches of *Salicornia virginica* to complete salt marsh plant communities that also included *Distichlis spicata*, *Limonium californicum*, *Jaumea carnosa*, and *Deschampsia cespitosa*. In this relatively undisturbed environment, I noted that the *C. maritimus* tended to grow larger and branched more, thus reinforcing the idea that if the species is listed as endangered and its environment is protected, it will begin to thrive again.

To finish up the project in Coos Bay area, we took soil salinity samples, noted soil profiles, and recorded relative amounts of plant species within 20 x 50 cm square Daubenmire plots. We did this twice on the south end of the spit and then proceeded to the main entrance of the spit (where most of the ORV and pollution occurs). We started where the bay begins to narrow and moved 500 meters north for each new test site. What Tom was hoping to get from this information was a rough sketch of how salinity, soil profiles, and plant communities change as we moved away from the ocean. This would help characterize the environment in which *Cordylanthus* occurs, and possibly give an idea as to where new populations of *C. maritimus* could be started. I also had the chance in to try something completely new to me--I swam in the Pacific Ocean (or rather I stood in the Pacific Ocean) and shivered happily. I also happened upon a beautiful present for my girlfriend---a wholly intact sand dollar.

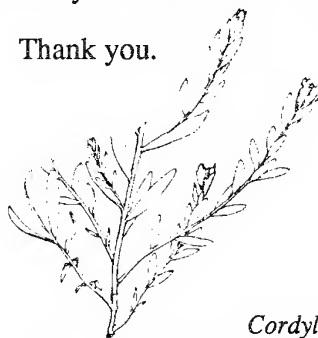
On the fifth and sixth days we drove from Coos County to Tillamook County to the northernmost known population of *C. maritimus*. It is on Netarts Spit in Cape Lookout State Park and is surrounded by some of the most beautiful land I have ever seen. We rented a boat across from the area where the plants had been seen, and proceeded to sputter across the bay. We landed in the most pristine area I had seen yet and found thousands of plants, many of them quite large. We set up our transects and recorded the necessary data, and then Tom sent Sarah and I out to estimate the number of plants present on the spit. Our rough estimation of the population size here at Netarts Spit was 4,000 plants, quite a sizable population growing in an already protected environment.

And we were done. All that was left to do was to drive home and sleep (until 1:30 p.m. the next day). I finally awoke with the knowledge that I had participated in valuable work for the environment. Despite the fact that even if *C. maritimus* is listed as a state and federal endangered species, it may not be completely protected. I rest easier at night knowing that there are many people out there who really do care for even the smallest members of our world. I guess some people would consider it a real tragedy if these beautiful salt marshes and their surrounding dune areas were closed to ORV traffic. But I know that they could find another place to play with their toys. Sooner or later people will realize that the planet and its "lesser" organisms are not just ours for the taking. When that realization occurs (to quote a popular song from the 1950s), "What a wonderful world it will be".

In conclusion, I would like to thank Tom Kaye, Sarah Brady, the Native Plant Society, the Oregon Department of Agriculture, the Coos Bay District BLM, Dennis Phillips, and especially Rhoda Love. The joint internship program is an incredibly valuable one, and I would urge the NPSO to keep it up. Remember, the youth of today are the botanists of tomorrow.

Thank you.

---Eric Peterson, Eugene



Cordylanthus maritimus spp. *palustris*
From Threatened & Endangered Vascular plants of Oregon

BUSH & ADMINISTRATION RETREAT ON WETLANDS WARPATH, BUT THE FIGHT IS STILL ON

"I want to ask you today what the generations to follow will say of us 40 years from now. It could be that they will report the loss of many millions acres more of wetlands. The extinction of species. The disappearance of wilderness and wildlife. Or they could report that, sometime around 1989, things began to change. That we began to hold on to our parks and refuges. That we protected our species. And that, in that year, the seeds of a new policy about our valuable wetlands were sown--- a policy summed up in three simple words: 'no net loss'. I prefer the second vision of America's environmental future."

This quote was delivered by then Vice-President Bush to the Waterfowl Symposium on June 6th, 1989. It is his campaign promise to help in the preservation of not just wetlands but also wildlife, wilderness and endangered species. At the time he was posing as The Environmental President.

Recently, through the Council on Competitiveness chaired by Vice-President Dan Quayle, the President proposed to change the legal definition of wetlands to suit political purposes. That was proposed despite the objections of wetlands experts from four Federal agencies. These new rules would, if implemented, completely eliminate the legal presence of all wetlands in 29 states, and that of at least half of all surviving wetlands nationally. One professional in wetlands management stated that "the proposed revisions are inconsistent with established tenets of wetlands ecology". Others who have worked with the proposed new manual used the terms "scary", "absurd", "inflexible" and "unworkable".

A study prepared by 40 scientists and funded by the Environmental Defense Fund and the World Wildlife Fund was critical of the new rules. The report, released January 16th, states that the rules would cause severe economic and environmental damages by increasing flooding and water pollution and by allowing development and destruction of extensive habitat areas for a variety of endangered species and other wildlife. The study concludes that the new rules would force spending of billions of dollars on new water treatment facilities to replace the filtering abilities of lost wetlands, and lead to billions more in losses from flooding once presently protected wetlands were turned to other uses.

A government interagency team set up to field test the new definitions stated "The proposed revisions represent a departure from the scientific understanding of wetlands ecology". The team found "no basis" for the changes, either in the "scientific literature, nor...(in) the field testing". They stated that the changed definitions fail to identify "well-recognized wetland ecosystems". They found the proposed manual of wetlands delineation internally inconsistent and difficult to apply, and wrote that the delineation methods "are scientifically unsound, are unworkable...and will lead to greater costs, uncertainty and delay." The proposed method of wetlands delineation would define away half of our remaining wetland acreage. The Bush Administration forbade release of this report (despite a supposed opportunity for public comment), but in time-honored Washington fashion, it was leaked despite Official efforts to prevent it. In the resulting furor, the Administration backed away from this whole proposal, and declared that a new effort to redefine wetlands would be undertaken.

The collapse of this line of attack on our nation's wetlands protection methods does not mean conservationists can relax their watch on the regulation of wetland areas. The Hayes Bill (HR1330) is still before Congress. This would designate the Army Corps of Engineers as the only regulatory agency overseeing dredging and filling of wetlands, eliminating the EPA's current ability to veto Corps' decisions. It also declares that Section 404, which is widely used to protect wetlands from destruction, is not a wetlands protection provision at all but rather is intended to encourage economic development. And it also redefines jurisdictional wetlands. The current method of wetlands determination, based on scientific methods combining plants, geology and hydrology, was worked out by several government agencies. The alterations of the Hayes Bill would create a three-tiered ranking system for wetlands (low, medium and high value), eliminate protection for 'low value' wetlands and arbitrarily limit the amount of land in the high value range to no more than 20% within any one county, and require the government to buy all lands in the high range. This impractical bill is designed to make regulation of wetlands both limited and costly. And it is only the most damaging of several congressional bills under consideration.

Attempts to knock down wetland protection regulations at the Federal level undermine state and local efforts here in Oregon and elsewhere. Two wetland conservation plans in Oregon have only recently been finalized, for the West Eugene wet prairie remnants and the Portland-area Columbia River South Shore. These land use approaches identify wetlands and give fair warning of needed preservation efforts. Twelve years ago, through the efforts of a local 'Friends' organization, Hedges Creek Marsh in Tualatin, the largest surviving wetlands complex in Washington County, was made subject to a City of Tualatin Wetland Protection Ordinance which has functioned well ever since. Solid local and regional wetlands protection and land use planning efforts like these will be jeopardized if arbitrary political changes are made in wetlands regulations at the Federal level. By hamstringing the Federal level protection upon which we depend, those who favor irresponsible development will be allowed to accelerate the demise of wetlands areas nationwide.

Wetlands are uniquely valuable, productive areas. They are home to many native plants, both rare and common. Many birds, fish and other wildlife cannot exist without them, and many more are partially dependent upon them. The current serious decline of our waterfowl populations nationwide is largely due to the already large-scale destruction of wetlands. Nationwide, we have already lost an estimated 53% of our original wetlands to farming, urbanization, roads and other development. Our current inadequate protection system is allowing the loss of an estimated 290,000 acres each year.

Because of the central value of wetlands to our nation's ecosystems, and the strength of the current attack upon their conservation, it is important to let your congressmen know that you value and care about these crucial areas and want more protection for them, not less. Mention the importance of wetlands and the benefits they provide. President Bush should be reminded of his "no net loss" promise. Ask for better funding of wetland acquisition and restoration. To contact your public officials on this or other issues, see the list of addresses and phone numbers in the next column. An excellent source of information about wetlands and their preservation is The Wetlands Conservancy, PO Box 1195, Tualatin, OR 97062 (503-691-1394). Many other conservation groups have their own body of information and strong interest in the preservation of our crucial wetlands.

--Bryan Boyce

CONTACTING YOUR PUBLIC OFFICIALS

Wishing to make your views known to your elected representatives in Congress? Here are the numbers to write or call:

For letters specifically on wetlands issues, the following is of use:

Mr. Gregory Peck
Wetlands Regulations (Mail Code A-104f)
US Environmental Protection Agency
401 M St. SW
Washington DC 20480

Write to Representatives Les Aucoin, Bob Smith, Ron Wyden, Peter DeFazio, and Mike Kopetski at:

The Honorable _____
US House of Representatives
Washington DC 20515
Phone them via the Congressional
Switchboard at 202/224-3124.

Write to Senators Mark Hatfield and Bob Packwood at:

The Honorable _____
US Senate
Washington DC 20510
Phone them via the Congressional
Switchboard at 202/224-3124.

Also:

President George Bush
The White House
1600 Pennsylvania Ave., NW
Washington DC, 20500
The White House Switchboard number is:
202/456-1414.

The most effective letter is knowledgeable but written with obvious personal conviction. Letters following any obvious format that is repeated by many writers carry less impact with the staff which reads them. Concrete information is important, but so is intensity of feeling. Incorporate both if possible.

BITS AND PIECES

---NEWS AND INFORMATION FROM ALL OVER

MT. PISGAH ARBORETUM SEEKS NATURE GUIDES

Mt. Pisgah Arboretum is starting the eleventh year of its Outdoor Education Program. Weekday mornings April 22nd to June 5th, 1992, volunteers will guide school children on nature walks at the Arboretum. The walks emphasize ecological concepts. Guides teach about life cycles and adaptations of the plants and animals in the Arboretum, and about the interdependence of all life.

The success of this valuable program is due to the volunteer guides, who give their time, energy and love to the children. More guides are needed! Volunteers receive free educational materials as well as free natural history training from the Arboretum. Volunteers attend one indoor training session (March 13th or 19th, 9:30 to noon at the Lane County Extension Auditorium, 950 W. 13th, Eugene), and two outdoor training sessions (April 8th and 9th, 15th and 16th at the Arboretum). No previous experience required. At the sessions volunteers will be presented with many ideas and activities that will help them to lead a successful walk. In the winter months additional guide training walks are offered, as well as CPR and first aid training. On Saturday, Feb. 21st, at 10am, Rick Fraga, LCC professor, will teach Forest Ecology.

If you are interested, call the Education Coordinator, Fran Rosenthal, at the Mt. Pisgah Arboretum office (747-3817) or home (686-8741).

VOLUNTEER OPPORTUNITIES FOR NATIVE PLANT ENTHUSIASTS

The Garden Club of America (GCA), in cooperation with its affiliates in Portland, Tacoma and Seattle, and with Berry Botanic Garden, Pacific Crest Outward Bound, and the Wind River District of the Gifford Pinchot National Forest, will sponsor a volunteer program this coming summer to assist in rare plant studies. The GCA has provided a grant to sponsor this program to have volunteers assist in information gathering about threatened and endangered species. Examples include monitoring *Sisyrinchium sarmentosum* and

Pleuricospora fimbriolata, inventorying botanically interesting areas, and surveying timber sales areas and potential recreation sites for T&E plants.

There will be two 5-day sessions, July 20-24 and July 27-31. Food and rustic lodging will be provided. Volunteers should be in good physical health and interested in native plants. KP chores will be shared. For more information, contact Kate Swabey, 6132 SW 45th Ave., Portland, OR 97221 (244-5684).

Sponsorship of Audubon PBS Specials Successfully Hit by Timber, Beef Interests

Its been twice now. The National Audubon Society has had the temerity to create and air a program on a controversial environmental subject, and the sponsor of the series has been attacked for its support of it. In both cases the result has been loss of the sponsor for the Audubon series. "Rage over Trees" provoked the timber interests into a campaign that resulted in the pullout of the Stroh Brewery from the sponsorship. The recent special "The New Range Wars", despite covering the ranchers point-of-view as well as that of environmentalists, resulted in an all-out campaign by the National Cattlemen's Association and the National Inholder's Association to persuade GE to drop its sponsorship of the series. Weapons used were threats of boycotts of GE products and a massive letter writing campaign. Soon after this began GE dropped sponsorship of the program, effective in a year. They claim this has nothing to do with the cattle lobby.

These are essentially attempts to keep preservationist's viewpoints from reaching the public on the PBS airways, and from commercial channels as well. Due to the length of time before GE actually is out of the sponsorship, some letterwriting supporting their continued backing of the series may still be of use. Each program in the series reaches 20 million Americans. It is important to keep this viewpoint before the nation. Write to: Mr. Jack Welsh, Chairman of the Board, General Electric, 3135 Easton Turnpike, Fairfield, CT 06431 (203-373-2871).

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GUIDELINES FOR CONTRIBUTORS

The NPSO *Bulletin* is published monthly as a service to NPSO members and the public. Contributions of all types are welcome.

DEADLINE: Copy is due with the editor by the 10th of each month. Submissions can be in any form. Author's name & affiliation are at the end of the article. Double space between paragraphs. For special materials (e.g., plant keys) choose an appropriate format, keeping in mind that readers may wish to carry your article pasted inside their favorite field guide. Formatting assistance is available from your editor. All *Bulletin* articles now go into the new NPSO database via computer. Camera-ready copy is not used, with rare exceptions.

Computer output: The editor prefers articles submitted on Macintosh or IBM disks, or via modem. Contact the editor for details.

Illustrations: Line drawings, prints, and high contrast B&W prints are useable. Some Macintosh graphics can be used also. Contact the editor about our current needs, or send them along with your article.

Credits: If the item is not original, name and date the source. For original items, identify the author and indicate, for news items, if a by-line is desired. Indicate whether the item is to be used in its entirety or excerpted at the editor's discretion.

Scientific Names: Nomenclature should follow *Flora of the Pacific Northwest*, by Hitchcock et al., when appropriate. Use both scientific and common names if possible. *Italicize* genus and species, or underline.

Return of Originals: Submissions are not returned unless requested.

Membership in the Native Plant Society of Oregon is open to all.

Membership applications, renewals, and changes of address (include old address and zip code) should be sent to the Membership Chair.

NATIVE PLANT SOCIETY OF OREGON MEMBERSHIP FORM

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Chapter (if known) _____

Address _____

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If so, please write your Old Address here:

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Phone (Home) _____ (Work) _____

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Jan Dobak, NPSO Membership Chair, 2584 NW Savier St., Portland OR 97210-2412.

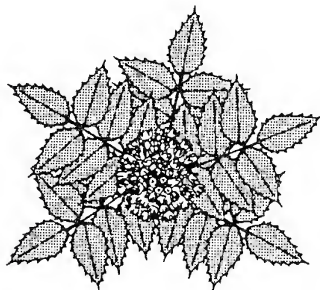
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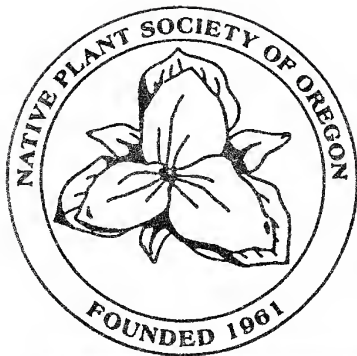
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OF OREGON**

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of Oregon's native vegetation

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IMPORTANT NOTE TO FIELD TRIP PARTICIPANTS:

Field trips take place rain or shine, so proper dress and footwear are essential. Trips may be strenuous and/or hazardous. Please contact the trip leader for information about difficulty, mileage, and terrain. Participation is at your own risk. Bring water and lunch. All NPSO activities are open to the public at no charge (other than carpool mileage), and friends, newcomers and visitors are always welcome.

Notice to field trip chairs and leaders: The Forest Service and other Federal agencies have set policies limiting group size in wilderness areas to 12. The reason for this is to limit the human impact on these fragile areas. Each group using wilderness must be no larger than 12.

CHAPTER NEWS

Blue Mountain

9 Mar., Mon.

MEETING. 7:30pm in Morrow Hall, Rm. 130, Blue Mtn. Community College. Don Rydrych will present his wildflower slides and would like members help him identify them. We will also schedule field trips. For more information call Jerry Baker (566-2244).

Corvallis

10 Mar., Tues

MEETING. 7:30 pm in Corl House, 3975 NW Witham Hill Rd., Corvallis. Ethan Perkins will speak on "The Pollination Biology of Prairie Plants". For more information, call Duncan Thomas (752-6529).

14 Apr., Tues

MEETING. 7:30 pm in Corl House, 3975 NW Witham Hill Rd., Corvallis. Susan Kephart of Willamette University will tell us about her work on *Silene douglasii* var. *oraria*, a rare plant of coastal headlands. For more information, call Duncan Thomas (752-6529).

Emerald

7 Mar., Sat.

FIELD TRIP: Landscape architect Tom Lister will present his master plan for Eugene's Wayne Morris Ranch and lead a guided tour of the park. We will also explore the park pasture and examine the off-leash dog controversy as it relates to potential environmental damage. Lunch and drink optional as this walk will be completed by noon. Depart at 10am from the parking lot of South Eugene High School, corner of 19th and Patterson. For further information call Jenny Dimling (343-3242).

- 9 March, Mon. **MEETING.** 7:30pm in the Library, Kennedy Middle School, 2200 Bailey Hill Road, Eugene. Ellen Deehan Clark, Lane Community College Botanist, will show slides and speak on "Belize: Mayan Jungle and Coral Reef." Ms. Clark will discuss her recent explorations of the rain forest jungle and the shoreline of this Central American country on the Caribbean. For more information, call Jenny Dimling (343-3242).
- 21 Mar., Sat. **FIELD TRIP:** BLM botanist Nancy Wogen will lead a trip to the Mohawk Old Growth Research Natural Area located in the McKenzie Resource Area near Marcola. This RNA has a mix of old growth forest and small marsh communities. Bring lunch, drink and hiking shoes. Depart at 10am from the parking lot of South Eugene High School, corner of 19th and Patterson. For further information call Nancy (683-6111) or Jenny Dimling (343-3242).
- 11 Apr., Sat. **FIELD TRIP:** Michael McCabe, Willamette National Forest botanist will lead a trip to Bunchgrass meadows within the Warner Creek fire area of the Oakridge Ranger District. We will discuss a range of management and rehabilitation prescriptions as well as view the results of last fall's initial rehab efforts. Participants should gain a better understanding of the complex issues involved in this fire restoration project. Bring lunch, drink and hiking shoes. Depart at 9am from the parking lot of South Eugene High School, corner of 19th and Patterson or meet at the Oakridge District Ranger Station on Hwy. 58 at 10am. For further information call Jenny Dimling (343-3242).
- 13 April, Mon. **MEETING.** 7:30pm in the Library, Kennedy Middle School, 2200 Bailey Hill Road, Eugene. Dr. Kenton L. Chambers, Professor Emeritus of Botany from the Oregon State University Herbarium, will show slides and speak on the topic: "Does Every Species Really Count?" Come and hear a discussion of this very important concept in plant conservation. For more information, call Jenny Dimling (343-3242).

High Desert

- 24 Mar., Tues. **MEETING.** Jerry and Mike Igo of Mosier, Ore., will present a talk of their survey for Peck's locoweed in the Sisters-Redmond-Bend area last spring. Don't miss this interesting talk by two excellent botanists. Meet at 7:30pm at the Bend Senior Center on Marshall Street.

Mid-Columbia

- 4 Mar., Wed. **MEETING.** 7:30pm at the Old West Gallery, upstairs above Mel'o's Camera Shop, 312 East 2nd St., The Dalles. Use Alley entrance and park in Coast to Coast lot from 3rd St. Professional photographer Wilma Roberts, FPSA, will present a creative impression of wildflowers titled "Along Nature's Path".

North Coast

- 21 Mar., Sat. **FIELD TRIP.** Hike through the County Park at the Port. Meet at the Tillamook PUD at 10am to carpool.
- 31 Mar., Tues. **MEETING.** 7pm at the Carl Rawe Meeting Rm., Tillamook PUD, 1115 Pacific, Tillamook. We are continuing our plant morphology series, with members asked to bring a plant to key out.

Portland

- 7, 14, 21, & 28 Mar., Sat. **WORKSHOPS AND FIELD TRIP.** Jerry Igo of the Mid-Columbia Chapter of the NPSO will present a series of three workshops and a field trip on four successive Saturdays in March. The workshops will cover wildflower identification with emphasis on flowers of the Columbia River Gorge. Jerry will lead a field trip on the last Saturday of March to show many of the flowers discussed in the classes. The time and meeting place for the field trip will be announced at the last class in flower identification. The classes will be from 10am to noon. They will be held at the Leach Botanical Garden Manor House, located at 6704 SE 122nd Ave., Portland. These classes are jointly sponsored by the Portland Chapter of the NPSO and the Leach Botanical Garden. Jerry Igo is a well-known naturalist with a broad background in native plants.

- 10 Mar., Tues. **MEETING.** 7pm at First United Methodist Church, 1838 SW Jefferson St., Portland. David Hale will present "Plants of Peru".
- 11 Apr., Sat. **FIELD TRIP:** On the Deschutes River Trail from river's edge into the sagebrush hills, about a 4 mile loop among fine flowers. Leave 8am from the SW corner of the 122nd & K-Mart lot. Drive is about 90 miles each way. Leader is Louise Godfrey (223-4785)

Siskiyou

- 12 Mar., Thurs **MEETING.** Anita Seda of the Illinois valley Ranger District, Siskiyou National Forest, will talk on "Thomas Jefferson Howell Memorial Drive. She will describe the development of public access to the unusual plants and vegetation of Eight Dollar Mountain in Josephine County. 7:30pm in Room 171 of the Science Building at Southern Oregon State College. The public is invited. For information, call David Kennedy (535-6383).

Umpqua Valley

- 12 Mar., Thurs **MEETING.** "Plants of the Oregon Coastal Dunes" 7pm in Rm. 311 of the Douglas County Courthouse, Roseburg.
- 21 Mar., Sat. **FIELD TRIP:** An all day trip to the Oregon Coast to view *Cordylanthus maritimus* var. *palustris* and to analyze *Ammophila arenaria* eradication efforts. Leave 8am BLM parking lot 777 Garden Valley Rd. Roseburg. or rendezvous at 10am at the Sentry Market lot in Coos Bay. Bruce Rittenhouse, BLM District Botanist will guide. A 4wd and low tide will be helpful or half-mile walk. Call Bruce (756-0100), or Richard (673-3709).

Willamette Valley

- 16 Mar., Mon. **MEETING.** 7:00pm in Rm. 225 at the First United Methodist Church, 600 State Street, Salem. Tom Kaye will talk about the "Reproductive Ecology of Bradshaw's lomatium". For more information, call Cathy Connelly (393-1834).
- 21 Mar., Sat. **FIELD TRIP:** Early spring flowers of the Mid-Columbia Gorge. Call Barbara Halliday (371-1025) or Frank Kolwicz (364-0490) for meeting place and time.
- April **FIELD TRIP:** A mid-week day trip to Minto-Brown Island, Salem. Call Clint Urey (581-1805) for date and details.
- 25 Apr., Sat. **FIELD TRIP WORKSHOP:** Learn to identify what you'll find on this year's field trips. Introduction to using simple identification keys, hands-on practice on a brief field trip as part of the workshop. Call Cathy Connelly (393-1834) for place and time.

William Cusick

- 10 Mar., Tue. **MEETING.** 7:30pm Rm. 201, Hoke Hall (Student Center), Eastern Oregon State College, LaGrande. Presentation by Jim McIvor of the Forest and Range Sciences Lab entitled "Insect involvement in the life of *Lupinus caudatus*, Kellogg's lupine."
- 11 Apr., Sat. **FIELD TRIP:** Martin Stein will lead a 10 mile round trip hike along the lower Imnaha River to the Snake River in the gorge of the Hells Canyon National Recreation Area. Plants of interest in the area include: *Allium geyeri* and some endemic *Lomatiums*: *L. serpentinum* and *L. rollinsii*. Meet at the Safeway parking lot in Enterprise at 9am. For more information, call Marty (426-3443-H or 426-4978-W).
- 7 Apr., Tue. **MEETING.** 7:30pm ESD office, 2100 Main St., Baker City. Charlie Johnson, Zone Ecologist, US Forest Service, Baker, will present a slide show on endemic plants of the Blue Mountains. For more information call Bob Ottersberg, 963-4907.

LEARN THE GENDER OF YOUR GENERA

The generic names of plants are derived from classical Greek and Latin, and in those languages there are three genders--feminine, masculine, and neuter. Nouns are the names of things; in Greek and Latin, every "thing" must be either a "she," a "he," or an "it." To the ancient Romans, for example, each tree was a feminine "she" (arbor), each shrub a masculine "he" (frutex), and each stone a neuter "it" (saxum). Modern languages that are derived from or related to Greek or Latin usually retain masculine and feminine gender for a great many nouns which, in English, have become neuter. In German, for example, every plant has a feminine root (die Wurtzel), masculine stem (der Stamm), and neuter leaf (das Blatt). French treats the stem as masculine (le tronc) and the root and leaf as feminine (la racine, la feuille).

Memorizing the genders of nouns is, to me, one of the hardest chores when learning a foreign language. In English, we have done away with most of the gender-labeling of nouns, and nearly every object that is not evidently a male or female animal is considered to be of neuter gender (and hence an "it"--the root, the stem, the leaf). Of course, a cow is still "she" and a bull "he," and sailors may affectionately refer to their ship as "she." Remember, too, that Jerome Kern wrote a song about "Old Man River, he just keeps rollin' along."

Because English has only the vestiges of gender-specific nouns, we may not realize how important gender is to the scientific naming of plants. Every plant has a two-word Latin name consisting of a "generic name" and a "specific epithet." As in the Latin language itself, each genus name has a particular gender, either feminine, masculine, or neuter. When you learned the name *Rhododendron macrophyllum* for the common western rhododendron, you may not have realized that the final two letters of the species epithet, -um, are a clue to the gender of the generic name. The word *macrophyllum* is an adjective meaning "large leaved" in Latin, and the -um ending is a neuter suffix in the nominative case; therefore, *Rhododendron* must be a noun of neuter gender. The grammatical rule being followed here says that an adjective must agree in gender with the noun it modifies.

For species epithets that are adjectives, the most commonly seen suffixes are the feminine -a, the masculine -us, and the neuter -um. Also quite common is the suffix -is, indicating either feminine or masculine, versus -e indicating neuter. Generic names of trees offer good examples of the feminine gender; with few exceptions (e.g. *Acer*, neuter gender), all genera of trees are feminine, even if their names end with the seemingly masculine suffix -us. Note the feminine endings on the specific epithets of Pacific yew, *Taxus brevifolia*, red alder, *Alnus rubra*, and western larch, *Larix occidentalis*. Generic names of shrubs and herbs, however, can be masculine, feminine, or neuter; no easy rules allow you to tell which is correct in a given case.

I might as well admit that my interest in this "problem" was stimulated by the discovery that I have consistently been using the wrong gender for two common plant genera in Oregon--devil's-club (*Oplopanax*) and woodland-star (*Lithophragma*). For both genera, the spelling of the specific epithets is incorrect in nearly all the floras and reference books for Oregon! *Oplopanax*, which "the books" say has neuter gender, is actually masculine; hence, the plant's name must be spelled *Oplopanax horridus* (not "*horridum*"). *Lithophragma* has almost universally been considered to be feminine (standard references use feminine species epithets like "*parviflora*," "*tenella*," "*affinis*," etc.), but it is actually a neuter name. This means that we must change the spellings of all its epithets to a neuter form. A complete list of *Lithophragma* species in Oregon therefore becomes: *L. affine*, *L. bulbiferum*, *L. campanulatum*, *L. glabrum*, *L. parviflorum*, and *L. tenellum*. In 1963, the monographer of this genus, Roy L. Taylor, pointed out that, because the Greek stem-word phragma (meaning fence or wall; compare "diaphragm") has neuter gender, the generic name *Lithophragma* (a compound word meaning "stone wall") must also be neuter, not feminine. The error goes back to 1840, when John Torrey and Asa Gray first published the genus name and assigned feminine gender to it. Their usage went against the classical (i.e. ancient Greek) gender of the word, and therefore it must now be corrected. Dr. Taylor's discovery has unfortunately been mostly overlooked in botanical works published since 1963.

A useful review of guidelines for assigning gender to generic names was published recently by Bruno Manara (Taxon 40:301-308, 1991). He echoed the advice given in the International Code of Botanical Nomenclature (1988, Article 76), that "A generic name retains the gender assigned by its author, unless this is contrary to botanical tradition." The "unless" is a very big exception, however, because "botanical tradition" is considered to extend back to the writings of the ancient Greeks and Romans! This is what determines that *Lithophragma*, a compound name containing the Greek neuter stem-word *phragma*, cannot be feminine in gender as was previously thought.

Readers should be aware that not all specific epithets are adjectives agreeing in gender with the generic name. Some epithets based on personal names (e.g. *Dodecatheon hendersonii*, *Penstemon barrettiae*) have a suffix such as -i or -ae indicating possession (genitive case), irrespective of the gender of the genus. Other species epithets are nouns rather than adjectives and are called "substantive epithets." For these, the gender of the epithet is independent of the generic name. Examples in the Oregon flora include *Berberis aquifolium* (the epithet is an old out-of-use generic name, not an adjective), *Arctostaphylos uva-ursi* (same origin as above), and *Sidalcea hirtipes* (the epithet is a noun meaning "hairy foot").

As an exercise in identifying genders, here are three examples of Oregon plant genera, with sample specific epithets and their translations:

Amsinckia intermedia ("intermediate;" the -a ending shows that the genus name has feminine gender)

Amsinckia menziesii ("of Menzies;" the -i ending is the genitive [possessive] case in Latin and is masculine because Dr. Archibald Menzies was himself of male gender)

Amsinckia lycopsoides ("resembling *Lycopsis*," a genus of *Boraginaceae*; the -oides ending shows that the epithet is a substantive which need not agree in gender with the genus)

Mimulus guttatus ("spotted;" the -us ending shows that the genus name has masculine gender)

Mimulus washingtonensis ("from the state of Washington;" the -ensis ending is masculine)

Mimulus tricolor ("three-colored;" this adjective has the same spelling in all three genders)

Delphinium trolliifolium ("with the leaves of *Trollius*," a genus of *Ranunculaceae*; the -um ending shows that the genus name has neuter gender)

Delphinium viridescens ("becoming green;" the -ens ending marks the epithet as a participle [a verb form], spelled the same regardless of gender)
Delphinium occidentale ("western;" the -e ending is neuter)

—Ken Chambers,
Corvallis Chapter

MAPS AVAILABLE

Did you ever want a decent map showing areas not included in government recreation maps, without spending a fortune on USGS topo maps? Here are a couple of low-cost alternatives:

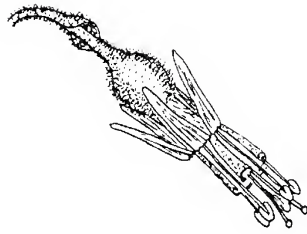
OREGON ATLAS AND GAZETTEER, 1991.

DeLorme Mapping, P.O. Box 298, Freeport, ME 04032. \$14.95, in most bookstores. Measuring about 12x15 inches, this atlas is like having a bound set of color USGS topo maps. The state is covered by 88 maps, the west half at a scale of 3/8 inch per mile (contour: 300 ft), the east half at 3/16 inch per mile (contour: 600 ft). Nearly every rural road is named or numbered, and features such as campgrounds and boat launches are included. The gazetteer includes listings of natural features, campgrounds, parks and wilderness areas, boat, bicycle and hiking routes, hunting areas, historic sites and museums, scenic drives, and boat launches. Township and range data are not included, and edge matching is not always consistent. It's still worth every penny.

ATLAS OF GENERAL HIGHWAY SERIES

County Maps, 1990. Oregon Department of Transportation, State Highway Division, Salem, OR 97310. \$7.50, ordered from ODOT. Measuring 8.5x11 inches, the ODOT atlas is a spiral-bound, black-and-white rendition of individual counties, the larger ones broken into several sheets, all at a scale of 1/4 inch per mile. Most roads are named or numbered, and major landscape features are also shown. There are no contour lines or gazetteer. Township and range data are included, so this atlas can be used in conjunction with the DeLorme atlas to define your location. These maps are reductions of much larger folio-sized maps (complete set available for about \$90), so you sometimes need a hand lens to read the fine print! Nevertheless, it's a bargain.

—John A. Christy
Portland Chapter



ROADSIDE RIGHT-OF-WAY *SIDALCEA* RESCUE

So far as we know, awareness is not something granted to vascular plants. So, it is unlikely that the population of *Sidalcea campestris* growing along the roadside in southeastern Lane County had any idea late last spring that its collective future was in doubt, threatened by a road realignment project. However, because of a cooperative effort by members of the Emerald Chapter NPSO and the staff of Lane County Department of Public Works steps were taken to save the stand.

On June 6th, 1991, prior to large scale excavation work for the road project, Emerald Chapter members Jennifer Dimling, Ed Alverson, Rhoda Love, Stephanie Shultz and Christa Chadwick met to dig up as many of the threatened plants as possible. They were assisted by David Dunlap, the Department's Vegetation Management Coordinator. All in all, about fifty plants were removed from the site and transported to a temporary home at the Mt. Pisgah Arboretum. There they were heeled in until the road project was finished and suitable weather for transplanting arrived.

The replanting was done January 18th, 1992 with another group of volunteers, some of whom had participated in the initial rescue. Joining Jennifer, Rhoda and David were Charlene Simpson, John Koenig, Bruce Newhouse and Mari Baldwin.

As far as the success of the effort is concerned, spring will tell the tale, when the volunteers will make an evaluation. If this project is deemed a success, other joint ventures between NPSO members and the conscientious staff of the Department of Public Works will be in the offing.

—David W. Dunlap
Vegetation Management Coordinator,
Lane County



Ribes lobbii, two views
Pioneer or Lobb's gooseberry
Drawn by Herm Fitz
Reprinted from Sept. 1980 *Bulletin*

UPDATE ON THE MT. HOOD MEADOWS EXPANSION PLANS

The Forest Service process approving the sizable expansion of Mount Hood Meadows Ski Area expansion continues its meandering way through the courts. A history of this process follows: Mt. Hood Meadows has been under a 20-year Master Plan originally approved in 1978. After 4 years of environmental and socioeconomic studies and public and agency input, a new Master Plan was approved by Mt. Hood National Forest Supervisor Mike Eddrington. The new plan expanded Meadow's day-use ski area and established Meadows as a year-round resort with a small city to support the envisioned heavy year-round use. A consortium of concerned organizations and individuals appealed this decision to the Regional Forester. In November he directed that impacts on American Indian social, economic and religious use of the area be given more study. In response, the Mt. Hood National Forest is surveying the ethnography of the expansion area, with completion of the study by early summer. Either a Supplemental Information Report (SIR) or a Supplemental Environmental Impact Statement (SEIS) will result from the study. A SEIS will delay final decision until next year, rather than July otherwise.

Meanwhile, Meadows is continuing with area modifications previously approved under the 1978 plan if they fit in with the new proposal. Changes include a new lift west of Texas, rebuilding two ski trail sections, creating a new ski trail, and blasting Showoff Rock. Public comments on the EA for the lift will be accepted until Mar. 15th. Get information from, and send comments to: Ken Davis, Hood River Ranger District, 6780 Hwy. 35, Parkdale, OR 97041.

ELECTION OF CANDIDATES FOR THE STATE BOARD OF DIRECTORS

The Nominating Committee is pleased to offer the following candidates for positions on the state Board of Directors. Ballots are included in this issue of the *Bulletin*, and must be received by April 10 to be counted. Send ballots to: John A. Christy, 7050 SW Canyon Crest Dr., Portland, OR 97225. The ballot inserts are preaddressed and only need to be folded along the dotted lines, stamped and taped or stapled to be mailed. Results of the election will appear in the May issue, and those elected will be sworn in at the annual meeting at Malheur Field Station on June 6.

PRESIDENT (Vote for one):

LISA CROFT has a B.S. from the University of Hawaii, and an M.S. from the University of Washington. Her thesis was on the Holocene paleoecology of the John Day Basin. She was active in the Botanical Society of Hawaii before moving to southern California to work on the Cleveland National Forest. She has worked as botanist for the Ochoco National Forest for the last two years.

VICE PRESIDENT (Vote for one):

DAN LUOMA is the only incumbent officer on this year's slate. He has a doctorate from the Geography Department of Oregon State University, and has been NPSO VP for two years.

SECRETARY (Vote for one):

BRUCE RITTENHOUSE has a B.S. from Oregon State University, and an M.S. from Pocatello State University. His research subject was an endemic *Astragalus* in Idaho, and he was both a chapter president and state vice president of the Idaho Native Plant Society. Bruce is now botanist for the Coos Bay BLM District.

TREASURER (Vote for one):

NANCY WOGEN earned a B.S. from Oregon State in Wildlife and Vegetation Ecology. She did vegetation and entomological studies for the Forest Service research lab in Corvallis, and for OSU's Oak Creek Lab. Nancy worked as botanist on the Salem BLM District, and in 1989 was hired by the Eugene BLM District to manage their rare plant program and the special areas program.

DIRECTORS AT LARGE (Vote for three):

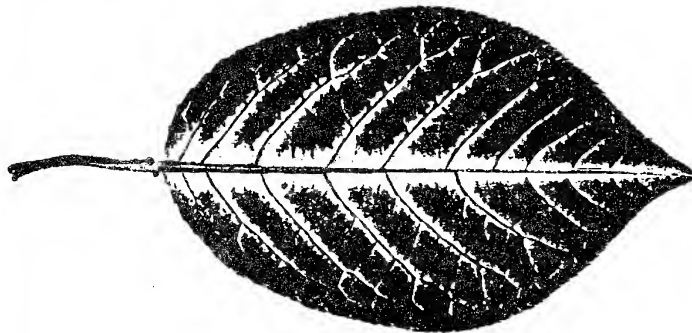
JENNIFER DIMLING most recently has been president of the Emerald Chapter. She is program botanist for the Willamette National Forest.

JERRY IGO is active in the Mid-Columbia Chapter, and is an expert on the flora of the Columbia River Gorge and the control of noxious weeds.

MARGIE WILLIS is active in the Willamette Valley Chapter, and served on the State Board in the past. She is natural resource planner for the Oregon State Parks.

PETER ZIKA lives in Corvallis and has served on the Board of Directors in the past. He is a partner in Salix, a botanical consulting firm.

—Submitted by John A. Christy



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cm

THE PLANT PUZZLE

Sponsored by the Siskiyou Chapter

Do you recognize this plant?
The first person to give the correct scientific name will win a prize.
The illustrated leaf is from a native woody species.

Send your guess on a postcard to:

Peter Zika
4230 NW Clubhouse Pl. #1
Corvallis, OR 97330

Christine Lorain Ebrahimi solved the February puzzle: alder buckthorn, *Rhamnus alnifolia*
A correction: Bruce Newhouse (not Rhoda Love) of Eugene solved the January puzzle.

SATURDAY FIELDTRIPS FOR THE '92 NPSO ANNUAL MEET

See the accompanying insert for dates and registration information. All field trips will leave from the Field Station parking lot at 8:15am after breakfast. We will carpool. You should bring a lunch (which can be provided by the field station with preregistration), warm clothes, raingear, and good hiking boots. A high clearance car is suggested. As distances are great, we will need to be sure everyone is back for the banquet which will start at 6:30pm.

THE NARROWS ACEC/STEPHANOMERIA EXCLOSURE

This site contains the only known location for one of Oregon's three federally listed endangered plants, the Malheur wirelettuce. We will hopefully be able to see this annual in bloom, learn of the recovery plans by BLM/USFWS, and survey for new plants. This spot is a 15 mile drive from the Field Station and walking will be easy. Leader will be Nora Taylor of the BLM.

GREAT BASIN/PAIUTE ETHNOBOTANY

Ethnobotanist Lucile Housley will lead us to the Stinkingwater Pass area where traditional native American uses of local plants will be discussed. A 2-hour each way drive with moderate hiking of 2 to 4 miles.

PONDEROSA PINE ANCIENT FORESTS

USFS ecologist Bill Hopkins will take us to the southernmost Blue Mountains to see and discuss the ecology of the remnant stands of Oregon's yellow-bellied pine forests. Driving time is 1 1/2 miles each way and hiking is 2 to 4 miles.

BOTANIZING AND BIRDING

THE MALHEUR REFUGE

The Malheur NWR is known as one of the best birding spots in the nation. Accomplished natural historians, Dick and Marge Ettinger will share some of their favorite birding areas and look at some of Malheur's native marsh vegetation on this trip down the Center Patrol Road. A nice mix of driving and easy walking.

RIDDLE RANCH/ROOSTER COMB RNA

This area on the Little Blitzen River has recently been acquired by the BLM. There is much history and good botanizing in this area. This ranch is located on the lower slopes of magnificent Steens Mountain. Lead by BLM personnel.

A DIFFERENT APPROACH TO RANCHING

The Fred Otley family has agreed to show us their approach to current ranch management. We will see how juniper control, prescribed fire, rotation grazing, and riparian protection are utilized by this ranching family with early roots in Harney County. A combination of moderate hiking and driving. Leader will be Stu Garrett.

MARSH RECOVERY

Botanist Sherry Spencer of PSU has been studying the recovery of lowlands from the flooding of the 1980's. Join her to see receding floodwaters and revegetation on the refuge. A short drive with moderate walking.

THE HORNS OF A DILEMMA

The Wallowa-Whitman National Forest has received a Challenge Cost Share Grant to develop interpretation for a rare plant that grows at one of their most heavily used recreation sites. The plant is Greenman's lomatium (*Lomatium greenmanii*), a species that grows only on Mt. Howard, on the Eagle Cap Ranger District. This is a place where the Wallowa Valley tramway brings 300 people a day in the summer. The area is showing signs of wear from all the people who wander uncontrolled; we want to encourage them to stay on the trail. There are thousands of individual plants of this species at the site, but this is the only place in the whole world that it grows. Here is the dilemma: do we actually play up the fact that there is a rare plant there, and that is why people need to stay on the trail? This is a great opportunity to actually showcase the plant and make a sell on rare plant conservation. But the other side of the coin is that by pointing out the rare plant, it may be making it vulnerable to vandalism, or to people trying to take some home to their garden. Would a better approach be to just stress the fragility of the whole area because of its sub-alpine nature, and not even mention the rare plant? If anyone has any opinions about or experience with this kind of thing, or can refer me to someone who does, please contact Paula Brooks at the Wallowa-Whitman National Forest, PO Box 907, Baker, OR 97814 ([503]-523-6391). Any suggestions on interpretation for this kind of site would be appreciated also.

—Paula Brooks
Wallowa-Whitman National Forest

CELEBRATING WILDFLOWERS— WILDFLOWER WEEK

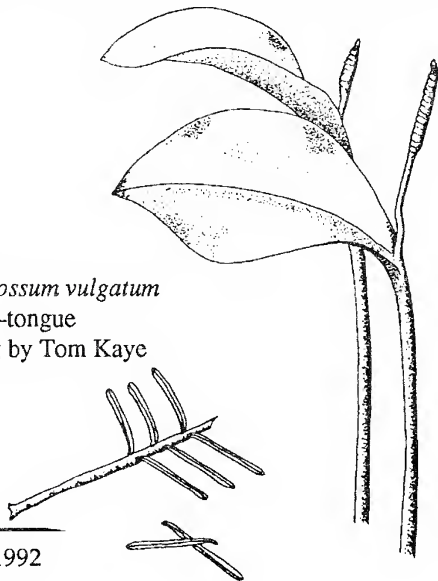
Region 6 of the US Forest Service will be showcasing Oregon and Washington's wildflowers May 18–24, 1992, by sponsoring 'Celebrating Wildflowers—Wildflower Week'. This is a celebration of some of our most beautiful and diverse natural resources. The intent of Wildflower Week is to promote conservation management of native plants and their habitats, including threatened, endangered and sensitive plants, through enhancing awareness, support and appreciation of wildflowers on our National Forests and Grasslands.

To accomplish this, several events are planned, including wildflower field trips, talks and displays. Some of the Forests are developing wildflower viewing brochures. If you are interested in being involved in Celebrating Wildflowers activities or projects, call your local Forest Service botanist or Native Plant Society chapter president.

Planning is at the beginning stage, and partnerships with interested groups and individuals are currently being sought. There are many ways organizations can participate. Partnerships can involve matching monies, labor and equipment, sharing technical skills, sponsoring activities or field trips.

The kick-off for the season is May 18–24, but field trips and other activities will be scheduled throughout the summer, depending the timing of peak wildflower displays for any area. For more information, please contact Kathy Ahlenslager (Forest Botanist), Colville National Forest, 765 S. Main, Colville, WA 99114; (509)–684-6212.

Ophioglossum vulgatum
Adder's-tongue
Drawing by Tom Kaye
1990



ECOLOGY AND THE SOUTHERN CASCADES

This coming Spring term, Tom Alzet (Area Ecologist for the Rogue River, Siskiyou and Umpqua National Forests), Dr. Frank Lang and other area ecologists will teach a course at Southern Oregon State College on plant ecology. This course will cover how to think about ecosystems, ecosystem processes (change, stability, disturbance), descriptive ecology of the Southern Oregon Cascades and application of ecosystem processes to forest management. The class will be offered through the Geography Department and will begin April 2nd, on Thursday nights from 7 to 10pm. Part of each evening will be reserved for discussion. Registration will be from March 2nd to 30th.

—Barbara Mumblo
Siskiyou Chapter

NPSO STATE BOARD TO MEET APRIL 4TH

Ever wonder how the Native Plant Society of Oregon manages its diverse statewide activities? Your next chance to see our far-flung State Board organization in session is on Saturday, April 4th, at 10am at the Tillamook Public Utility District's Carl Rawe Room, at 1115 Pacific, in Tillamook on the beautiful Oregon coast near Tillamook Bay. Coffee and tea will be provided. The meetings usually last until 2 or 3pm. All NPSO Board meetings are open to the public and Society members are encouraged to attend and observe and participate.

The voting members of the State Board of the NPSO include State Officers, Chapter Presidents, and the Directors of the organization. A quorum is needed at each meeting to conduct business. Each Board member has a report to make on the activities they direct or oversee, as do all state committee and subcommittee chairs. In an active organization such as ours good communications are essential in carrying out our purposes and in reaching our goals. Attendance by all Board members is needed to assure the clearest communications possible within our organization. If Board members or committee chairs cannot attend, they should either send a representative or submit a written report to the secretary before the meeting.

BITS AND PIECES

---NEWS AND INFORMATION FROM ALL OVER

RUSSIAN IMPORTS INCLUDE DEVASTATING PEST

With the end of the Cold War and the great improvements in relations with the former Soviet empire, it has been hoped that trade with Siberia would bring economic benefits to our region. Our loggers are at a cost disadvantage in competition with the Canadian and Southern timber regions, and historically have survived by offering higher quality old growth lumber at higher prices. Attempts are being made to import Siberian old growth to fill in at the mills. Many other goods are being imported also.

Whenever two geographical areas are linked by trade, the possibility exists for accidental introduction of disease or insect problems. In the case of Siberian trade, it is already too late to say "ooops". Trappings indicate that the Asian gypsy moth has arrived in Oregon, Washington and British Columbia. At this time it appears numbers are small. Though technically of the same species (*Lymantria dispar*) as the European race already present in this country, there are some important differences between the two races. The Asian race feeds on an even wider range of plant species than the European (which chooses from a list only 500 species long), and it grows faster. They are more cold hardy and could migrate further north. A more threatening difference is that the female Asian gypsy moth can actually fly long distances before laying eggs. The European version can only glide a short distance. Hence an infestation by Asian moths can spread very rapidly as compared to one of the European strain. Russian officials state that the egg laying flights in Siberia can be so massive that the branches of birches are snapped off, as if covered with ice.

Regulatory agencies in both the US and Canada are looking into their options for control of this pest. The USDA Animal and Plant Health Inspection Service is coordinating efforts with Washington, Oregon, Idaho and California to pool resources and strategies in a regional project team. A detection and eradication plan is to be implemented by early spring. Estimates of economic damages possible from the Asian gypsy moth, including lost forests, start at 35 billion and go up from there.

NEW JEPSON MANUAL TO BE COMPLETED BY DECEMBER

There is good news from Berkeley, where editors and staff working on the update of The Jepson Manual have received a grant of \$126,000 from the National Science Foundation for salaries and printing costs to complete the Manual. The grant ensures that the project will be completed on schedule before December 1992. Of the 185 authors contributing to the Manual, 180 have submitted their manuscripts. Three new artists have been hired to help Linda Vorobik (former editor of the NPSO Bulletin) and Emily Reid complete the illustrations. The completed Manual will be approximately 1600 pages long and will include 173 families, 1250 genera and approximately 7930 species, subspecies and varieties. Project Manager is Dr. Dieter Wilken and Editor is Dr. Jim Hickman (PhD from the University of Oregon). The new Jepson Manual will be dedicated to Lawrence R. Heckard, curator of the Jepson Herbarium from 1968 until his death last November 26th.

If you wish to join Friends of the Jepson Herbarium, their address is FJH, University of California, Berkeley, CA 94720.

US FISH & WILDLIFE SEEKING VOLUNTEERS

Come to Sheldon or Hart Mountain Refuge for experience with vegetation surveys in the northern Great Basin. This mostly involves riparian resource evaluations in many different habitats. The US Fish and Wildlife Service will provide a \$15 a day stipend, housing, transportation on the refuge and equipment. Camping in primitive conditions is required. Two positions are open, starting early May and continuing through August & September. Field experience with vegetation surveys in the Great Basin or other western areas preferred. Background in Botany. Willing to work in remote area, possess enthusiasm for habitat studies, and work well as a team member. Send resume and letter of interest by March 15, 1992 to: Mike Smith, Assistant Manager
Sheldon-Hart Mountain Refuges
Lakeview, OR 97630 (503)947-3315

STATE OFFICERS	DIRECTORS	John Christy, Bill Hopkins, Tom Kaye, Warren Pavlat, Kathy Schutt, Carolyn Wright
	PRESIDENT	Stephanie Schulz. 652 W. 10th St. #1, Eugene 97402; 485-1868
	IMMEDIATE PAST PRESIDENT ..	Stu Garrett. 21663 Paloma Drive, Bend 97701; 389-6981
	VICE PRESIDENT	Dan Luoma. 2912 NW Arthur Ave., Corvallis 97330; 758-8063
	SECRETARY	Sue Vrilakas. 1120 NE 162nd, Portland 97230; 253-7080
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GUIDELINES FOR CONTRIBUTORS

The NPSO *Bulletin* is published monthly as a service to NPSO members and the public. Contributions of all types are welcome.

DEADLINE: Copy is due with the editor by the 10th of each month. Submissions can be in any form. Author's name & affiliation are at the end of the article. Double space between paragraphs. For special materials (e.g., plant keys) choose an appropriate format, keeping in mind that readers may wish to carry your article pasted inside their favorite field guide. Formatting assistance is available from your editor. All *Bulletin* articles now go into the new NPSO database via computer. Camera-ready copy is not used, with rare exceptions.

Computer output: The editor prefers articles submitted on Macintosh or IBM disks, or via modem. Contact the editor for details.

Illustrations: Line drawings, prints, and high contrast B&W prints are useable. Some Macintosh graphics can be used also. Contact the editor about our current needs, or send them along with your article.

Credits: If the item is not original, name and date the source. For original items, identify the author and indicate, for news items, if a by-line is desired. Indicate whether the item is to be used in its entirety or excerpted at the editor's discretion.

Scientific Names: Nomenclature should follow *Flora of the Pacific Northwest*, by Hitchcock et al., when appropriate. Use both scientific and common names if possible. *Italicize* genus and species, or underline.

Return of Originals: Submissions are not returned unless requested.

Membership in the Native Plant Society of Oregon is open to all.

Membership applications, renewals, and changes of address (include old address and zip code) should be sent to the Membership Chair.

NATIVE PLANT SOCIETY OF OREGON MEMBERSHIP FORM

Name _____

Chapter (if known) _____

Address _____

Is this a change of address?

If so, please write your Old Address here:

City _____ State _____ Zip+4 _____ - _____

Phone (Home) _____ (Work) _____

City _____ State _____ Zip _____

* **DUES** include monthly NPSO *Bulletin*. Full membership is for a calendar year, January through December. New memberships enrolled during September through December are charged a reduced "Quarter Membership" rate.

() New	() Renewal	() Quarter Membership (Sep.-Dec.) \$3.00	() <i>Bulletin</i> Subscription only \$12.00
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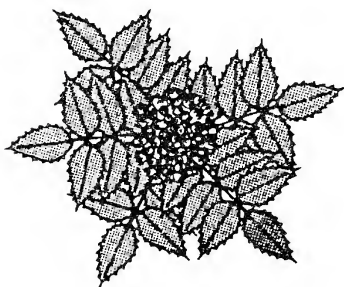
Jan Dobak, NPSO Membership Chair, 2584 NW Savier St., Portland OR 97210-2412.

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Native Plant Society of Oregon
Jan Dobak, Membership Chair,
2584 NW Savier St.,
Portland, Oregon 97210-2412

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**NATIVE PLANT SOCIETY
OF OREGON**

Dedicated to the enjoyment, conservation, and study
of Oregon's native vegetation

VOLUME 25 NUMBER 4

APRIL 1992

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IMPORTANT NOTE TO FIELD TRIP PARTICIPANTS:

Field trips take place rain or shine, so proper dress and footwear are essential. Trips may be strenuous and/or hazardous. Please contact the trip leader for information about difficulty, mileage, and terrain. Participation is at your own risk. Bring water and lunch. All NPSO activities are open to the public at no charge (other than carpool mileage), and friends, newcomers and visitors are always welcome.

Notice to field trip chairs and leaders: The Forest Service and other Federal agencies have set policies limiting group size in wilderness areas to 12. The reason for this is to limit the human impact on these fragile areas. Each group using wilderness must be no larger than 12.

CHAPTER NEWS

Blue Mountain

5 Apr., Sun.

For information on any Blue Mtn. Chapter activities, call Jerry Baker (566-2244).

FIELD TRIP: Upper Umatilla River--Thorn Hollow and Squaw Creek areas, to observe early Spring wildflowers. Leader: Jerry Baker. Depart from the Blue Mountain Community College Greenhouse at 8am, bring lunch and appropriate footwear for some walking.

6 Apr., Mon.

MEETING. 7:30 pm in Room 130, Morrow Hall, Blue Mountain Community College. We will continue to schedule future field trips, have further discussions concerning Karl Urban's wildflower coloring book and also gather ideas for Wildflower Awareness Week. Time permitting we will also view various members slides.

18 Apr., Sat.

FIELD TRIP: Harry Vincett will lead a trip to Central Oregon to observe *Pediocactus* and other endemics. Leave from the BMCC Greenhouse at 7am sharp! Bring lunch, refreshments and proper clothing, as this will be a fairly long day.

25 Apr., Sat.

FIELD TRIP: Umatilla National Wildlife Refuge with Manager Kathy Cheap. Visit the area of the proposed native plant interpretive site, view the wildflowers of the area, and also the waterfowl and other avian species that patronize the refuge. Leave from the BMCC Greenhouse at 8am.

Corvallis

12 Apr., Sun

FIELD TRIP: Findley Wildlife Refuge to look at early spring wildflowers. Meet at 10am in the parking lot across from the Monroe Street Beanery. Bring raingear and lunch. Contact Esther McEvoy (754-0893) for more information.

14 Apr., Tues

MEETING. 7:30 pm in Corl House, 3975 NW Witham Hill Rd., Corvallis. Susan Kephart of Willamette University will tell us about her work on *Silene douglasii* var. *oraria*, a rare plant of coastal headlands. For more information, call Duncan Thomas (752-6529).

FIELD TRIP: To Illinois Valley and Eight Dollar Mountain. If interested contact Esther McEvoy (754-0893)

12 May., Tues . **MEETING.** 7:30 pm in Corl House, 3975 NW Witham Hill Rd., Corvallis. Duncan Thomas will give a slide show on botanizing Africa's forests and savannas

Emerald

11 Apr., Sat. **FIELD TRIP:** Michael McCabe, Willamette National Forest botanist will lead a trip to Bunchgrass Meadows within the Warner Creek fire area of the Oakridge Ranger District. We will discuss a range of management and rehabilitation prescriptions as well as view the results of last Falls initial rehab efforts. Participants should gain a better understanding of the complex issues involved in this fire restoration project. Bring lunch, drink and hiking shoes. Depart at 9am from the parking lot of South Eugene High School, corner of 19th and Patterson or meet at the Oakridge District Ranger Station on Hwy. 58 at 10am. For further information call Jenny Dimling (343-3242).

13 Apr., Mon. **MEETING.** 7:30 pm in the Library, Kennedy Middle School, 2200 Bailey Hill Road, Eugene. Dr. Kenton L. Chambers, Professor Emeritus of Botany from the Oregon State University Herbarium, will show slides and speak on the topic: "Does Every Species Really Count?" Come and hear a discussion of this very important concept in plant conservation. For more information, call Jenny Dimling (343-3242).

11 May, Mon. **MEETING.** 7:30 pm in the Library, Kennedy Middle School, 2200 Bailey Hill Road, Eugene. Art McKee, Site Director of the H. J. Andrews Experimental Forest, will show slides and speak on a topic concerning the Andrews Forest and the New Forestry. His title will be announced here in May. For more information, call Jenny Dimling (343-3242). This will be our last meeting until September.

17 May, Sun. **WILDFLOWER SHOW.** Wildflower Festival at the Mount Pisgah Arboretum in Buford Park, off Seavey Loop Road. Wildflower display by Emerald Chapter NPSO, posters, notecards and T-shirts for sale, food, plant sale, puppet show, guided trail walks, music, books for sale, etc. 10 am to 4 pm.

High Desert

For information, call Bill Hopkins (388-7434).

Mid-Columbia

1 Apr., Wed. **MEETING.** 7:30pm at the Mosier School. John Christy of the Oregon Natural Heritage Program will discuss they types of wetlands found in the Northwest, emphasizing plant associations. He also will highlight the controversy surrounding how federal agencies define wetland boundaries.

12 Apr., Sun. **ANNUAL WILDFLOWER SHOW** at the Mosier School, 10am to 4pm. Also you can drive the Cherry Blossom Tour Route and take in the annual Mosiers Firemen's Benefit smorgasbord dinner at the Mosier Grange Hall.

6 May, Wed. **MEETING.** 7:30pm at the Mosier School. "Botanical Gardens and Native Plant Preservation". Linda McMahan, Executive Director of the Berry Botanic Garden, will give a slide presentation on the techniques used by botanical gardens to preserve native plants, including seed banks, research, and off-site living collections.

North Coast

28 Apr., Tues. **MEETING.** Program to be announced. 7pm at the Carl Rawe Meeting Room, Tillamook PUD, 1115 Pacific, Tillamook.

FIELD TRIP: Call Al Krampert (842-2308) for information about Earth Day hike at Cape Lookout.

Portland

- 11 Apr., Sat. **FIELD TRIP:** On the Deschutes River Trail from river's edge into the sagebrush hills, about a 4 mile loop among fine flowers. Leave 8am from the SW corner of the 122nd & K-Mart parking lot. Drive is about 90 miles each way. Leader is Louise Godfrey (223-4785)
- 14 Apr., Tues. **MEETING.** 7pm at First United Methodist Church, 1838 SW Jefferson St., Portland. Nancy Fredericks will speak on "*Calochortus*", rescheduled from an earlier date.
- 18 Apr., Sat. **FIELD TRIP:** Chetwood Loop Trail--see white oaks, a great variety of flowers and excellent views. Wear long trousers and long sleeves to protect against ticks and poison oak. Moderate 6.5 miles across open slopes. Elevation gain 1000ft. Meet at 9am, southwest corner of K-Mart parking lot at 122nd and Sandy. For more information call trip leader Mary Mason (227-4639).

Siskiyou

- 17 Apr., Fri. **MEETING.** "Botanical Areas in the Rouge River National Forest" will be presented by Barbara Mumblo, Botanist with the Applegate Ranger District. 7:30pm in Room 171 of the Science Building at Southern Oregon State College. For information, call David Kennedy (535-6383).

Umpqua Valley

- 9 Apr., Thurs. **MEETING** program to be announced. The UV Chapter meets every 2nd Thursday in the month in Room 311 of the Douglas County Courthouse, Roseburg. For information call Richard (673-3709).
- 11 Apr., Sat. **FIELD TRIP.** To Roman Nose and Kentucky Falls in the Siuslaw NF. Meet 7:45 am BLM parking lot , 777 Garden Valley Road for carpooling, leave 8 am. For information call Mildred Thiele (673-5397).
- 25-26 Apr., Sat. **GLIDE WILDFLOWER SHOW.** Our long-time dedicated crew needs volunteers to help collect, arrange or whatever. We are scheduling some of short field trips on Saturday and Sunday. For volunteers call Mildred Thiele (673-5397) or field trips call Richard Sommer (673-3709).
- 23 May., Sat. **FIELD TRIP.** To King Mountain Rock Garden via Wolf Cr, Coyote Cr to see *Fritillaria glauca*, *F. recurva*, *Lewisia pygmaea* var *nev.*, *Anemone oregana*. Meet 7:45 am BLM parking lot , 777 Garden Valley Road for carpooling, leave 8 am.

Willamette Valley

- 20 Apr., Mon. **MEETING:** 7pm in Room 225 of the First United Methodist Church, 600 State St., Salem. Dr. Winn Cudmore, a biology teacher at Chemeketa Community College, will give a slide show about old growth forests. Come join us to hear about this controversial topic! For more information, call Cathy Connelly (393-1834).
- 25 Apr., Sat. **FIELD TRIP/WORKSHOP:** 9:00-12:00noon. Learn to identify what you'll find on this year's field trips. Diana Bodtke, a botany teacher at Chemeketa Community College, will explain botanical terminology and introduce us to using identification keys. This will be a hands-on, laboratory type of workshop. Call Cathy Connelly (393-1834) for location.
- 2 May, Sat. **FIELD TRIP:** Clint Urey, one of the original founders of the Willamette Valley Chapter of the NPSO, will lead us in a walk around Independence Rock to view many beautiful wildflowers including the exotic blooms of fairy-slipper orchids. Call Clint Urey (581-1805) for place and time.
- 9 May, Sat. **FIELD TRIP:** Margie Willis will lead a 3 hour wildflower walk at Silver Falls State Park. We will meet at 2pm at the lodge in the park. This will be the same weekend that a wildflower show is held at the park, so plan to come early and see the show and then join our hike to the lower falls! You could turn around early and make this a short 1 hour walk. For information, call Margie (364-7772 or Kathy Connelly (393-1834).

- 18 May, Mon. **MEETING/FIELD TRIP:** Meet at 6:30pm in the parking lot of the Safeway located on Edgewater Road in West Salem to carpool to the Delbert Hunter Arboretum in Dallas. Or meet us at the entrance to the Arboretum in Dallas around 7pm. Members of the Delbert Hunter Arboretum will join us in a tour of the grounds. They have emphasized native plants in the assemblage of this beautiful garden. For more information call Kathy Connelly (393-1834).
- 23-25 May, Sat.-Mon. **FIELD TRIP:** Memorial Day Weekend trip to Southwestern Oregon. For further information, contact Wilbur Bluhm (393-2934).
- William Cusick**
- 7 Apr., Tue. **MEETING.** 7:30pm ESD office, 2100 Main St., Baker City. Charlie Johnson, Zone Ecologist, US Forest Service, Baker, will present a slide show on endemic plants of the Blue Mountains. For more information call Bob Ottersberg, 963-4907.
- 11 Apr., Sat. **FIELD TRIP:** Tim Stein will lead a 10 mile round trip hike along the lower Imnaha River to the Snake River in the gorge of the Hells Canyon National Recreation Area. Plants of interest in the area include: *Allium geyeri* and some endemic *Lomatiums*: *L. serpentinum* and *L. rollinsii*. Meet at the Safeway parking lot in Enterprise at 9am. For more information, call Tim (426-3443-H or 426-4978-W).
- 23 May, Sat. **FIELD TRIP:** Kent Coe will lead a walk at the Wallowa-Whitman National Forest's Blue Mountain Crossing of the Oregon Trail Interpretive Area as a commemoration of Wildflower Week. Take a lunch and plan to leave from the LaGrande Safeway parking lot at 8:30am. For more information call Kent ([503] 962-7049).

Welcoming Our New Members...

These are our new members from the dates Dec. 7, 1991 to Mar. 7, 1992:

Blue Mountain Chapter:

Mike & Julie Black
Anne E. Douglas
David C. Powell
F. Vance Pumphrey
Jennifer Stein
Julie Van't Hul

Corvallis Chapter:

Bruce N. Hayes
Sherry K Pittam
Helen V. Smith
Marjorie Storm
Margriet Wetherwax

Emerald Chapter:

Doris Allen
Susan Barger
Frances Burns
Michael Fahy
Pat Ford
Pamela Good

Herb Kicklak
Floyd Lord
Glenn Meares
Alma Sapienza
Michael W. Shippey

High Desert Chapter

Elaine L. Ammann
Jennifer Doan-Scott
John & Elizabeth Horsnell
Jennifer Hutchinson
Beverly Meyer
Andrea Sandmann

Portland Chapter

Gordon Anthon
Dan & Karla Ayres
Roy & Kathryn Beaty
Judith Bradshaw
Carol T. Cole
Ernest & Claire Johnson
Lizzie King
Allan Lehman
Jane McGary
Mary Pakenham-Walsh
Irene Vlach
Linde Westling
Roger Yerke

Siskiyou Chapter

Christine Ebrahimi
James Hutchinson

William Cusick Chapter

Ed & Donna & Amanda Bottum
Melanie Crocker
Penny Hall
Gary O. Hathaway
Dianne Kiel-Jones
Tim & Pat Lichen
Ardis Waters

Willamette Valley Chapter

Tony Allen
Stephen Carter
Meredith Cote
Dave Garcia
Wallace W. Hansen
Claire Hibler
Mike Murphy
Barbara Slimak
Debra L. Sparber
Julie Knurowski-Thiel
Jonathan Yoder

TIPTOE THROUGH THE TALUS: A LOOK AT *AMSINCKIA CARINATA*, A MALHEUR COUNTY ENDEMIC

"Don't you have any rare plants that grow on level ground that we could study?" Jenny Holah asked Bob Meinke as the three of us crouched on a steep talus slope just outside of Harper, Oregon, in northern Malheur County. A few moments later, I watched my backpack accelerate before rolling to a stop at the base of the slope. If an average observer had happened to pass, they undoubtedly would have questioned what could have lured us to such an unlikely spot on a cold, blustery May day. However, if the observer had been a botanist familiar with the area, our motives would have been clear: we were there at the behest of the Bureau of Land Management to study *Amsinckia carinata*, the Malheur Valley fiddleneck, which is endemic to the distinct talus outcrops around Harper. *Amsinckia carinata* (*Boraginaceae*) is listed as a Threatened species by the State of Oregon and is a Candidate for listing under the federal Endangered Species Act, as well. In fact, the species was thought extinct for many years, until several populations were rediscovered in 1984 by Elaine Joyal. Working with Oregon Department of Agriculture's Plant Conservation Biology Program on a grant from the NPSO, I hoped to learn more about the distribution and biology of this rare plant during our stay.

Before we could begin our work, Jenny and I had to learn to distinguish between *Amsinckia carinata* and *A. tessellata*, a weedy relative. At first, the two annual species appear virtually identical; both plants are about 25 cm. tall, with hairy leaves and yellow-orange flowers. However, Bob pointed out several differences between the two. *A. tessellata* tends to have narrower, hairier leaves and somewhat smaller flowers than *A. carinata*. If these subtle differences eluded us, we only needed to examine a plant's nutlets: *A. tessellata*'s are cobbled and rough, while *A. carinata*'s are unmistakably shiny and smooth. With this knowledge under our belts, we were ready to explore.

In spite of the drought, several populations of *Amsinckia carinata* were thriving in late May, and many plants were flowering. Though green-house tests confirm that the plant is capable of self-pollination, several bee species were visiting the small, dark yellow flowers. Other individual plants had already set seed, and we gathered their distinctive shiny nutlets for future studies.

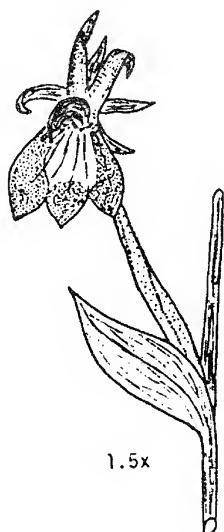
We arrived at our first *Amsinckia* site on a rather dismal morning and began a transect near the top of a bouldery outcrop. The small pieces of talus that covered the slope made any movement quite challenging. Near the top of the slope, the plant community abounded with *A. carinata*, as well as scattered individuals of *Amsinckia tessellata* and *Atriplex spinosa*, which quickly became known as "the devil bush." Anyone who has ever slid to an abrupt landing atop one of these spiny plants will understand the sentiment that led to this nickname. Since relatively little is known about *Amsinckia carinata*, we were interested in taking basic measurements on plants at different elevations along the slope. We determined the number of plants per unit area, their heights, the number of flowering branches, and the size and depth of the talus.

As we worked our way down several slopes, we found substantially less *A. carinata* and increasingly more individuals of the weedy *A. tessellata*. At the foot of some slopes, where the two species intermingled, there were several plants that appeared to be hybrids between *A. carinata* and *A. tessellata*. This phenomenon will be the subject of future study. As we worked, we questioned why these two *Amsinckia* species have different distributions along the length of the slope. Previous soil analyses had indicated that *A. carinata* tends to occur on soils comparatively high in sodium. The amount of sodium tends to decrease downslope where populations of *A. carinata* decreased relative to *A. tessellata*. This gradient might help answer our question on distribution. Another possible answer might be found in our talus measurements. Larger and deeper talus appeared to be correlated with increased density and increased reproduction in *A. carinata*. *A. carinata* may be better able to withstand the difficult environment near the tops of these slopes but is outcompeted in gentler environments. We cannot know for certain without experimental manipulations.

Our solitude near these rocky outcrops was occasionally interrupted by a passing animal. At one point, we were intently examined by a pronghorn, and later, Jenny had a chance encounter with a rattlesnake. While we did not directly witness any ambling bovines, we saw evidence of their presence in the neighborhood.

Domestic cattle have disturbed talus and compacted soil in the area, particularly at the base of the *Amsinckia* slopes. In addition, grazing has facilitated the introduction of Eurasian weeds, such as cheatgrass (*Bromus tectorum*). This species, as well as *A. tessellata*, may compete with *Amsinckia carinata* in areas where the plant has spread downslope. While we cannot guess what the populations of *Amsinckia carinata* might have looked like before European settlement, current land use practices appear to pose a threat. The soil disturbance and non-native species associated with grazing may compromise the continued survival of this species. In addition, mining claims are evident along some of the talus slopes that support *A. carinata*. The major substrate disturbances associated with mining could have a devastating effect on *A. carinata*, since it is expected to be difficult, at best, for any reclamation effort to recreate the talus slopes the species appears to require for survival. Before this area is disturbed further, it is important to understand what impacts these disturbances may have on the survival of this endemic species.

—Lisa Lantz
Department of Botany and Plant Pathology
Restoration Ecology and
Plant Conservation Biology Cooperative Project
Oregon State University



Dwingia elegans

Showy dwingia

Drawn by Herm Fitz

Reprinted from NPSO Bulletin Jan. 1983

NPSO 1992 BUDGET (JANUARY 1 – DECEMBER 31)

Adopted by the Board of Directors
January 25, 1992

Estimated Income:

Membership dues	\$12,500.
Environmental Federation of Oregon	6,000.
Rare/Endangered Plant Fund	600.
Notecards	400.
Interest	300.
Leighton Ho Fund	200.
<u>Sub-total</u>	<u>20,000.</u>
Balance Brought Forward	6,400.
TOTAL INCOME	\$26,400.

Anticipated Expenses:

Bulletin	\$6,000.
Environmental Federation of Oregon	5,500.
Chapters share of dues @ 35%	4,375.
Kalmiopsis	2,500.
Research Grants (4 @ \$400.)	1,600.
Membership chair	800.
Board and other committees	600.
R/E Committee	500.
Conservation Committee	500.
President	450.
Legislative Committee	375.
Secretary	350.
Treasurer	250.
Education Committee	100.
Cascadia Conference	100.
Annual meeting-Banquet speaker	100.
ONRC	100.
Nat. Res. Def. Council	100.
Fees and Taxes	80.
Desert Conference XIII	50.
Natural Areas Association	35.
Wildflower Research Center	25.

<u>Sub-total</u>	<u>24,490.</u>
Balance Forwarded (savings)	1,910.
TOTAL EXPENSES	\$26,400.

State board members and committee chairs attending state board meetings are reimbursed for mileage over 100 miles per meeting (non-cumulative) @ 21¢/mile.

--Dan Luoma, NPSO Vice-President

OREGON'S BIODIVERSITY: CAN WE SUSTAIN IT? THE HIGH DESERT CHAPTER'S 1992 FIELDTRIPS

Oregon's conservation challenge for the next century is apparent: Can we offer future generations an ongoing opportunity to enjoy our state's natural biological diversity? The answer is not clear, but lots of folks are considering the problem. The emphasis in conservation is shifting away from the preservation of small plots of land which focus on only one species to the management of larger chunks of landscape in the hope that this strategy will offer more protection to species and habitats. Both private groups and federal agencies have pioneered the protection of biodiversity in Oregon. The USFS and BLM through wilderness areas, RNA's, ACEC's, and other special conservation designations have protected millions of acres of land. The Nature Conservancy, a private non-profit group, has led the way in the non-governmental arena. We invite you to join us in our visits to a variety of these preserves in our 1992 field season.

The NPSO is a private, non-profit educational association whose members are interested in the enjoyment, study, and conservation of Oregon's native vegetation. Membership is open to all. Founded in 1961, NPSO includes over 900 members in 11 chapters statewide. We invite non-members to join us for our no-fee hikes. Amateurs and experts are equally welcome!

All Bend Chapter fieldtrips will depart from Juniper Park parking lot near the tennis courts at 7th and NE Franklin Ave. in Bend at 8:30am sharp unless otherwise noted. Please arrive a few minutes early to carpool. We will normally return to the parking lot by 5:30pm. Please be sure your gas tank is filled and bring along water, a sack lunch, a daypack, and sturdy footwear. Consider taking layered clothing, sunscreen, a hand lens, camera, binoculars, etc. Weather may be severe, trails can be rough, and roads are sometimes poor. Riders are encouraged to reimburse their drivers: 22 cents per mile is a suggestion. Please don't smoke. No picking or collecting of plants is allowed. Please leave your pets at home. You participate at your own risk. Please call trip leaders for more information.

The Lawrence Memorial Grasslands Preserve Sat., May 2. The Nature Conservancy owns and manages this 400 acre preserve which features a climax stand of native Oregon bunchgrasses and

wildflowers. This will be an easy to moderate four mile round trip hike to see the native meadow steppe ecosystem. Trip leader: Stu Garrett (389-6981 eves).

The Painted Hills, John Day Fossil Beds National Monument Sat., May 16. This area is managed by the National Park Service. One of three federal national monuments in Oregon, it preserves not only important aspects of biologic diversity in several rare plants but also protects amazing geologic resources. Easy hiking. Trip leader: Stu Garrett (389-6981 eves).

NPSO Annual Meeting at Malheur Field Station, Fri., Sat., Sun, June 5-7. This is the Society's annual get-together. It will be hosted by the High Desert Chapter and will feature a variety of excellent fieldtrips to interesting spots. A banquet dinner will feature Lucile Housely speaking on Paiute ethnobotany. See the NPSO *Bulletin* for details.

Forest Health and Sustainable Forest Management Sat., July 18. Some areas of the conifer forests of central and eastern Oregon are "ecosystems in collapse" according to the USFS regional forester. We will see the conditions that have led to this problem and understand the natural forces at work. Various approaches to the situation will be considered. Entomologists from the Deschutes National Forest will accompany us. Trip leader: Stu Garrett (389-6981 eves).

Broken Top Volcano/Three Sisters Wilderness Sat., Aug 15. Our annual hike to the spectacular display of alpine wildflowers and glacial geology at Broken Top. A five mile round trip moderate to strenuous hike with a 1500 ft. elevation gain, mostly off-trail through Three Sisters Wilderness. The number of hikers is limited due to USFS restrictions on wilderness travel. Call trip leader Stu Garrett (389-6981 eves) to preregister.

Contact Field Trip Chair Dr. Stu Garrett, 21663 Paloma Dr., Bend OR 97701 ([503] 389-6981 eves) for more details. On trips where participant numbers are limited, preference is given NPSO members. News publications are free to republish this listing but are requested to include enough information to fully inform potential trip participants.

SATURDAY FIELDTRIPS FOR THE '92 NPSO ANNUAL MEET

All field trips are Sat., June 6th, and will leave from the Field Station parking lot at 8:15am after breakfast. We will carpool. Bring lunch (which can be provided by the field station with preregistration), warm clothes, raingear, and good hiking boots. A high clearance car is best. As distances are great, we will need to be sure everyone is back for the banquet at 6:30pm.

THE NARROWS ACEC/STEPHANOMERIA EXCLOSURE

This site contains the only known location for one of Oregon's three federally listed endangered plants, the Malheur wirelettuce. We will hopefully be able to see this annual in bloom, learn of the recovery plans by BLM/USFWS, and survey for new plants. This spot is a 15 mile drive from the Field Station and walking will be easy. Leader will be Nora Taylor of the BLM.

GREAT BASIN/PAIUTE ETHNOBOTANY

Ethnobotanist Lucile Housley will lead us to the Stinkingwater Pass area where traditional native American uses of local plants will be discussed. 2-hr. drive one way & a moderate 2-4 mile hike.

PONDEROSA PINE ANCIENT FORESTS

USFS ecologist Bill Hopkins will take us to the southernmost Blue Mountains to see and discuss the ecology of the remnant stands of Oregon's yellow-bellied pine forests. Driving time is 1 1/2 hours each way and hiking is 2 to 4 miles.

BOTANIZING AND BIRDING

THE MALHEUR REFUGE

The Malheur NWR is known as one of the best birding spots in the nation. Accomplished natural historians, Dick and Marge Ettinger will share some of their favorite birding areas and look at some of Malheur's native marsh vegetation on this trip down the Center Patrol Road. A nice mix of driving and easy walking.

RIDDLE RANCH/ROOSTER COMB RNA

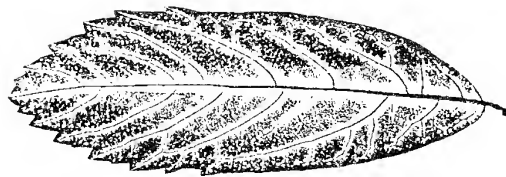
This area on the Little Blitzen River has recently been acquired by the BLM. There is much history and good botanizing in this area. This ranch is located on the lower slopes of magnificent Steens Mountain. Lead by BLM personnel.

A DIFFERENT APPROACH TO RANCHING

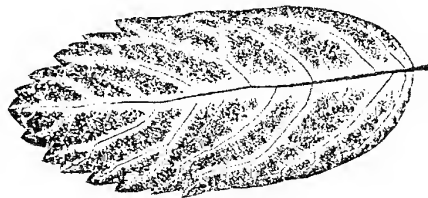
The Fred Otley family has agreed to show us their approach to current ranch management. We will see how juniper control, prescribed fire, rotation grazing, and riparian protection are utilized by this ranching family with early roots in Harney County. A combination of moderate hiking and driving. Leader will be Stu Garrett.

MARSH RECOVERY

Botanist Sherry Spencer of PSU has been studying the recovery of lowlands from the flooding of the 1980's. Join her to see receding floodwaters and revegetation on the refuge. A short drive with moderate walking.



1
cm



THE PLANT PUZZLE

Sponsored by the Siskiyou Chapter

Do you recognize this plant? The first person to give the correct scientific name will win a prize. The illustrated leaves are from a native woody species.

Send your guess on a postcard to:
Peter Zika
4230 NW Clubhouse Pl. #1
Corvallis, OR 97330

Gordon Larum of Medford was first to solve the March puzzle: common chokecherry, *Prunus virginiana*.

WILDFLOWER VIEWING OPPORTUNITIES IN THE EAST GORGE

When the Columbia River Gorge National Scenic Area was created in 1986, about a dozen parcels of BLM land in the East gorge became national forest land. The parcels are mostly grasslands which have been leased by the BLM for cattle grazing. The Forest Service is currently considering which of these lands should continue to be leased for grazing. Other potential objectives to be considered include protection/restoration of native grassland plant communities, and recreational use, including stiles and foot trails in an area of the Gorge where no other recreational opportunities exist.

Three of these parcels are located along Washington State Route 14, around 100 miles of easy driving from the center of Portland. Like islands in a sea of private land, these public lands are virtually unknown to the public, and have long been managed (read "overgrazed") as part of nearby ranches. Nevertheless, the public has a complete right to access these lands on foot, so long as existing fences or gates are not damaged.

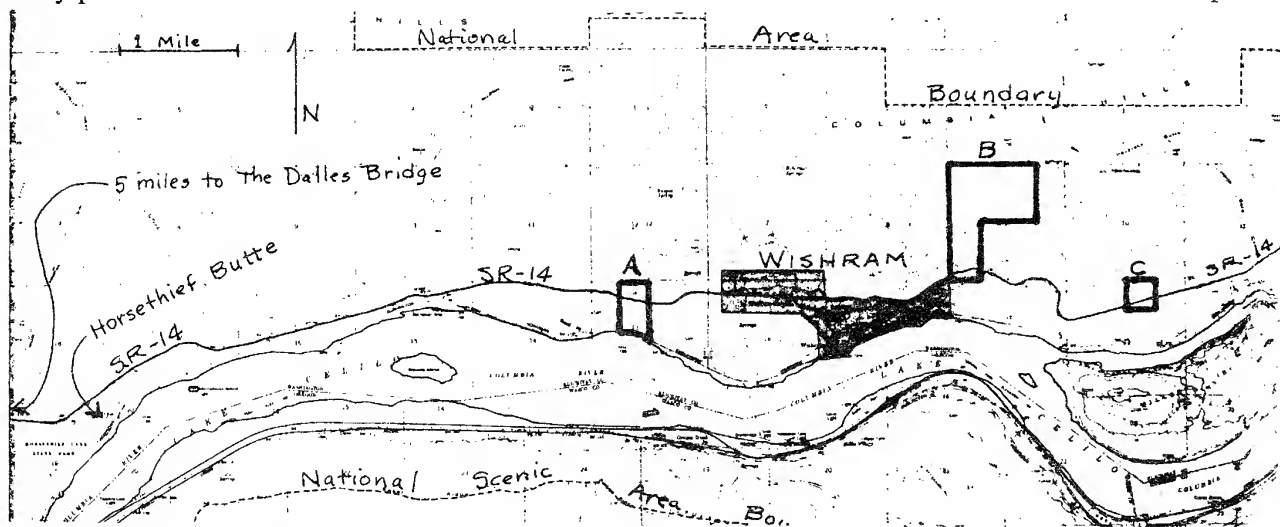
Parcel A (MP 91.35 to MP 91.60) Approximately 70 acres. Park at the turnout at MP 91.70. Approaching this parcel from the west, one sees a jagged line of rocks on the right. This is the east boundary of the parcel. A patch of bluebunch wheatgrass (*Agropyron spicatum*) is found at the west base of these rocks. Cactus (*Opuntia polyacantha*), sand-dune penstemon (*Penstemon acuminatus*), and The Dalles milk-vetch (*Astragalus sclerocarpus*) are among the many plants one can find.

Parcel B (MP 94.1 to MP 94.35) 320 acres. Park at the gravel turnout at the end of the guard-rail at MP 94.4. The lower slopes of this large parcel are pretty well lost to cheatgrass and other introduced weeds, but the gully near 94.2 has a population of Columbia milk-vetch (*Astragalus succumbens*) and a nice patch of bluebunch wheatgrass (*Agropyron spicatum*) farther up. One can climb this gully (watch out for rattlesnakes) to a dirt road which can be followed back down to the highway. Even better, climb another 200 ft. to the next bench. The elevation at the highway is 600 ft.; at the top of the parcel 2400 ft. As one climbs to the higher slopes, one sees less heavily grazed land, so the wildflower show improves dramatically, as do the views and sense of remoteness.

Parcel C (MP 95.9 to 96.15) 40 acres. Park at the gravel turnout east of the parcel. The parcel extends to the cliffs 500 ft. above the highway. Most of this area continues to be severely overgrazed, but there are good native plants in a few small places inaccessible to cattle, e.g., smooth desert-parsley (*Lomatium laevigatum*). This parcel is not fenced off from adjoining private land, so be careful to stay on national forest land.

When its raining in Portland, the weather is often dry and sunny in the semi-arid east end of the Gorge. So when you yearn for wide open spaces, go and take a look at these public lands.

—Russ Jolley
Portland Chapter



GOOD NEWS! NEW RECORDS SET!

It is nice to be able to give a federal land manager a pat on the back for a job well done. Such an opportunity has arisen for Superintendent Tom Schmidt of the Ochoco National Forest. Schmidt's forest is (as best as I can determine) the first in the nation to have full-time and fully-trained botanists in the supervisor's office and in all the ranger districts. He has been a strong supporter of the forest's botanical and sensitive plant programs and realizes the importance of these aspects of the forest to Oregon's biological diversity. Let's hope his leadership in this area is soon followed by the other Forests in the region and the nation. I'd like to introduce the 'starting five' to NPSO readers.

Lisa Croft is the Forest botanist on the Ochoco National Forest. Her masters thesis from the University of Washington was on the Holocene paleoecology of the John Day Basin. She has held the position for several years and has worked hard as an advocate for sensitive plants and their habitats. Her support is another reason for the hiring of such an excellent team on the Ochoco.

Andrew Kratz is the District Botanist for the Snow Mountain Ranger District. His undergraduate degree in biology is from Occidental College and for his masters from Western Washington University he studied Sitka spruce in Olympic National Park. He has been president of the Eastern Washington Chapter of the Washington Native Plant Society and president of the William Cusick Chapter (LaGrande) of NPSO.

Charlie Schelz has a masters in Botany and Plant Ecology and most of his professional experience has been in the intermountain west, particularly the Colorado plateau. His chief professional interests include photography, long-term monitoring, and the protection of rare and endangered species and communities. He is currently working in the Supervisors Office to integrate the botany program with the GIS and Natural Heritage computer databases and is involved in forest health issues.

Mike Simpson is the District Botanist for the Prineville Ranger District and the Crooked River Grasslands. He has a masters in Forest Ecology from the University of Idaho and studied Subal-

pine Fir/Beargrass habitats in central Idaho for his thesis. He has been active in the Idaho Native Plant Society.

Faye Streier is District Botanist for the Paulina Ranger District. Her BS is in Terrestrial Ecology from Western Washington University. She was most recently a botanist for the Mt. Baker-Snoqualmie Forest and has been active in the Washington Native Plant Society.

Richard Helliwell has a BA in anthropology from the University of Maryland and a BS in Biology from Southern Oregon State College. He has worked for several years for the Warm Springs Indian Reservation, co-authoring a plant association guide and researching the ecology and management of plants of cultural significance. He is District Botanist for the Big Summit Ranger District.

NPSO is pleased to welcome these professionals to the Ochoco National Forest and looks forward to working with them to sustain and enhance the native plant riches of Central Oregon's fields and forests.

On a different topic, NPSO and five other conservation organizations petitioned the US Fish and Wildlife Service in October 1991 to list under the Endangered Species Act seven Eastern Oregon plant species threatened by cyanide leach mining. The petition was reviewed in Oregon and has been sent to Washington, DC for final review and recommendation. We should have the report in a matter of weeks.

—Stu Garrett
Eastside Conservation Chair



Sphaeralcea coccinea
Red globe-mallow
Drawn by Jeanne R. Janish
From Hitchcock & Cronquest's
Flora of the Pacific Northwest

VI SOBOLIK HONORED

Viola Sobolik, a charter member of the Willamette Valley Chapter, was recently recognized at the 35th annual Dallas Community Awards Banquet. She was presented with a Special Achievement Award for her tireless work with the Delbert Hunter Arboretum and Botanic Garden.

Vi and nine others formed The Friends of the Delbert Hunter Arboretum several years ago, and she is the arboretum's curator. At the banquet, she was cited for "growing the arboretum from scratch". One of her nomination letters stated, "She has spent many hours on her knees planting the hundreds of bulbs and plants that soon will be in a showplace for all in the City of Dallas and State of Oregon to be proud of". The arboretum is said to be the only one in Oregon that contains strictly native flora.

At the same event, The Friends of the Delbert Hunter Arboretum received the Outstanding Organization Award. "They exemplify the Dallas spirit", said City Manager Roger Jordan. Vi was its first president.

Congratulations, Vi!

—Mariana Bornhold
Willamette Valley Chapter

HELP STUDY RECOVERY OF NATIVE PLANTS IN THE COLUMBIA RIVER GORGE BURN AREA

There will be a meeting April 7th, 1992 at 7pm to develop plans for volunteers to help with the evaluation of recovery of native vegetation in the areas burned last fall between Eagle Creek and Angel's Rest. The meeting will be at the USFS Columbia River Ranger District, 31520 SE Woodard Road, Troutdale, Ore. Molly Sullivan, Botanist for the Columbia Gorge district will provide maps and suggestions for activities where volunteers can be of help in this project. Everyone is welcome; if the date and time are not convenient for you, please call Molly at (503) 695-2276 to find out how you can participate.

—Michael Fahey
Portland Chapter President

EFFORT UNDERWAY TO MAP NATIVE *RHODODENDRON* DISTRIBUTION

To: Native Plant Society of Oregon

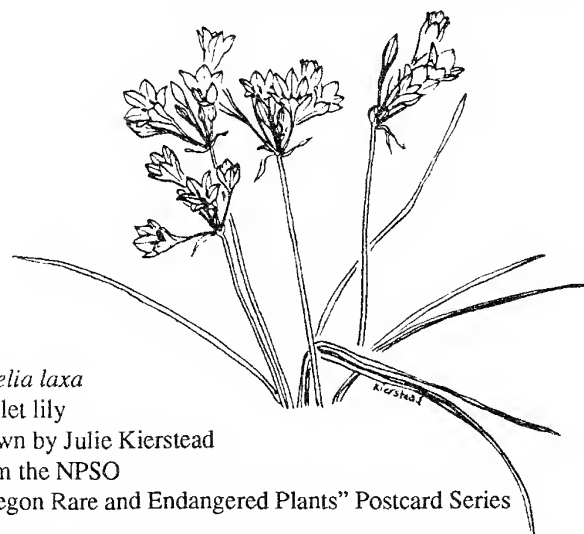
I am a member of the North Kitsap Chapter of the American Rhododendron Society. I am working with others in the Society in an effort to draw distribution maps of the native western USA species of *Rhododendron*. We hope to have up to date maps drawn in time for the National Convention to be held in Tacoma in the Spring of 1993.

We are hopeful you or members of your group can provide information about the distribution of *Rhododendron macrophyllum*, *Rhododendron occidentale* and *Rhododendron albiflorum* in Oregon. I have contacted the National Forests and the Bureau of Land Management for help, and Mr. Michael R. Crouse, Deputy State Director for Lands and Renewable Resources suggested I contact you.

Any help you may be able to provide will be most appreciated. Any further references as to sources of information would also be appreciated.

Sincerely,

Henry R. (Hank) Helm
10674 NE Manor Lane
Bainbridge Island, WA 98110
Home Phone: (206)-624-8673
Office Phone: (206)-842-5464



Tritelia laxa
Triplet lily
Drawn by Julie Kierstead
From the NPSO
"Oregon Rare and Endangered Plants" Postcard Series

BITS AND PIECES

---NEWS AND INFORMATION FROM ALL OVER

CLASSES AT MALHEUR FIELD STATION

Malheur Field Station, site of this year's NPSO Annual Meeting (June 5-7), is also known for its wide variety of classes, meetings and workshops. Many of the offerings include substantial field-work. The facility is a regional educational center supported by a consortium of colleges and universities. Offerings this season include, art, astronomy, botany, entomology, birding and mammalogy. Following are brief overviews of a few classes.

"Hot Spring Ecology", July 12-25, will visit 10 hot springs in as many days, concentrating on the study of thermobiology and hot springs ecology. "Lithic Technology" will emphasize the hands-on making of stone tools, their use, and study of wear patterns with an eye on understanding archaeological specimens. "Observational Astronomy" will allow you to learn the night sky in a clear, pollution-free area.

Introductory classes are available in botany, entomology and bird watching. Art classes are offered. A Elderhostel program offers educational programs tailored to students over 60.

Information on this may be had by writing:
Malheur Field Station
HC 72 Box 260
Princeton, OR 97721
(503) 493-2629

JUNIPER CONTROL AND ASPEN ENHANCEMENT

The Bureau of Land Management has begun an effort at controlling juniper trees on Steens Mountain in the BLM's Burns District. Aspen stands in much of the intermountain west are among the most valuable local plants communities. The groves are found in wet areas, and the lush undergrowth is heavily used by animals. In an initial effort, 18 volunteers spent two days chainsawing juniper out of a declining aspen grove. Volunteers came from Eastern Oregon Agricultural Research Center, the Rocky Mountain Elk Foundation, and local ranches.

Many researchers believe that a combination of fire suppression and grazing has encouraged spread of juniper in much of Central Oregon. About half of the juniper trees in the Steens Mountain area are less than 15 years old, and the vast majority have sprouted since the initiation of grazing. Aspen and some other shrubs and trees do not compete well in thick woodlands of juniper. The once wide-ranging meadow steppe of Eastern Oregon has given ground to the juniper. Increased forage both for native wildlife and cattle is one of the reasons for juniper clearing also. The use of fire is advocated also, as juniper does not survive this well. In some situations, such as fragile soils or the presence of rare plants or animals, manual removal is done.

THIS SEASON AT TOM MCCALL PRESERVE

The Nature Conservancy is providing naturalist-guided tours at the spectacular Tom McCall Preserve on Rowena Plateau. This area combines one of Oregon's best wildflower displays with dramatic Columbia River Gorge vistas and landforms created by past catastrophic geologic events. A volunteer naturalist will be available at the preserve weekends through May 26th, 11am through 4pm. Hikers are reminded that conditions on the plateau are primitive. No restrooms are available, and pets are not allowed.

Please preregister for all events (228-9561). Guided walks are scheduled for Saturdays, April 4th and 18th, and May 2nd and 16th. Each walk will feature a new cast of flowers. Meet at the Preserve entrance at 1pm. A guided birding outing is planned for Saturday 8:30am April 25th. The area is noted for a wide variety of birds due no doubt to the diversity of habitats available.

Two Knapweed Pulls are scheduled for May 9th and June 20th. Elimination of the obnoxious weed aids in preservation of the area for its original inhabitants, our native wildflowers. These outings have always been a favorite of NPSOers. Bring trowels, weedpullers of any description, gloves, lunch, water, and energy. Please preregister for the pulls (228-9561). Meet at the Rowena Crest Viewpoint at 9am.

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GUIDELINES FOR CONTRIBUTORS

The NPSO *Bulletin* is published monthly as a service to NPSO members and the public. Contributions of all types are welcome.

DEADLINE: Copy is due with the editor by the 10th of each month.

Submissions can be in any form. Author's name & affiliation are at the end of the article. Double space between paragraphs. For special materials (e.g., plant keys) choose an appropriate format, keeping in mind that readers may wish to carry your article pasted inside their favorite field guide. Formatting assistance is available from your editor. All *Bulletin* articles now go into the new NPSO database via computer. Camera-ready copy is not used, with rare exceptions.

Computer output: The editor prefers articles submitted on Macintosh or IBM disks, or via modem. Contact the editor for details.

Illustrations: Line drawings, prints, and high contrast B&W prints are useable. Some Macintosh graphics can be used also. Contact the editor about our current needs, or send them along with your article.

Credits: If the item is not original, name and date the source. For original items, identify the author and indicate, for news items, if a by-line is desired. Indicate whether the item is to be used in its entirety or excerpted at the editor's discretion.

Scientific Names: Nomenclature should follow *Flora of the Pacific Northwest*, by Hitchcock et al., when appropriate. Use both scientific and common names if possible. *Italicize* genus and species, or underline.

Return of Originals: Submissions are not returned unless requested.

Membership in the Native Plant Society of Oregon is open to all.

Membership applications, renewals, and changes of address (include old address and zip code) should be sent to the Membership Chair.

NATIVE PLANT SOCIETY OF OREGON MEMBERSHIP FORM

Name _____

Chapter (if known) _____

Address _____

Is this a change of address?

If so, please write your Old Address here:

City _____ State _____ Zip+4 _____

Phone (Home) _____ (Work) _____

City _____ State _____ Zip _____

* **DUES** include monthly NPSO *Bulletin*. Full membership is for a calendar year, January through December. New memberships enrolled during September through December are charged a reduced "Quarter Membership" rate.

() New	() Renewal	() Quarter Membership (Sep.-Dec.)	\$3.00	() <i>Bulletin</i> Subscription only	\$12.00
() Student.....			\$ 8.00	() Sustaining.....	\$ 30.00
() Regular.....			12.00	() Patron.....	100.00
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Jean Davis Memorial Award Fund. \$ _____
 Leighton Ho Memorial Award Fund. \$ _____
 Rare and Endangered Plant Fund. \$ _____

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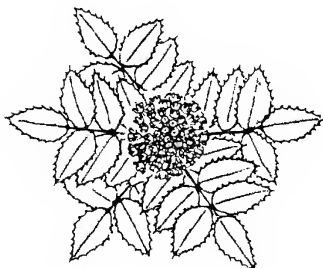
Jan Dobak, NPSO Membership Chair, 2584 NW Savier St., Portland OR 97210-2412.

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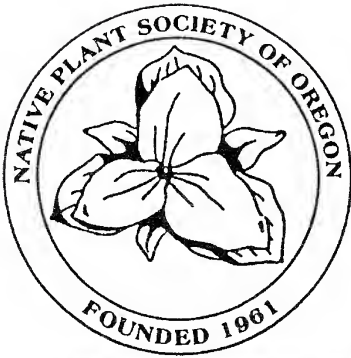
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*Send change of address notices
and membership requests to:*
Native Plant Society of Oregon
Jan Dobak, Membership Chair,
2584 NW Savier St.,
Portland, Oregon 97210-2412

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Membership inquiries: Jan Dobak, Membership, 2584 NW Savier St., Portland OR 97210-2412
For more society information, see the inside back cover.

IMPORTANT NOTE TO FIELD TRIP PARTICIPANTS:

Field trips take place rain or shine, so proper dress and footwear are essential. Trips may be strenuous and/or hazardous. Please contact the trip leader for information about difficulty, mileage, and terrain. Participation is at your own risk. Bring water and lunch. All NPSO activities are open to the public at no charge (other than carpool mileage), and friends, newcomers and visitors are always welcome.

Notice to field trip chairs and leaders: The Forest Service and other Federal agencies have set policies limiting group size in wilderness areas to 12. The reason for this is to limit the human impact on these fragile areas. Each group using wilderness must be no larger than 12.

STATE NEWS

5-7 June, Fri.-Sun.

ANNUAL MEETING. See the insert and the article on p. 59 for more information.

7 June, Sun.

STATE BOARD MEETING. 10am. All invited. This will take place at the Annual Meeting at Malheur Field Station.

CHAPTER NEWS

Blue Mountain

For information on any Blue Mountain Chapter activities, call Jerry Baker (566-2244).

Corvallis

10 May, Sun

FIELD TRIP to look for *Delphinium pavonaceum*. Meet at 2pm in the parking lot across from the Monroe Street Beanery. Bring raingear and lunch. Contact Esther McEvoy (754-0893) for more information.

12 May., Tues.

MEETING. 7:30 pm in Corl House, 3975 NW Witham Hill Rd., Corvallis. Duncan Thomas will give a slide show on botanizing Africa's forests and savannas

30 May, Sat.

FIELD TRIP to Mary's Peak. Meet at 9am in the parking lot across from the Monroe Street Beanery. Bring raingear and lunch. Contact Esther McEvoy (754-0893) for more information.

Emerald

9 May, Sat.

FIELD TRIP: Tom Pringle will lead a trip to Findley Wildlife Refuge to view spring wildflowers. Bring Lunch & hiking shoes. Depart at 9:30am from the parking lot of South Eugene High School, corner of 19th & Patterson. For more information call Tom at 484-0669.

11 May, Mon.

MEETING. 7:30 pm in the Library, Kennedy Middle School, 2200 Bailey Hill Road, Eugene. Jennifer Dimling, Emerald Chapter President, will show slides and speak on "Reproductive Biology of Oak Flat *Sidalcea*." (Note: Art McKee of the Andrews Experimental Forest, will not be able to address us as he must testify on new forestry before a U. S. Senate subcommittee on that date.) For more information, call Jenny Dimling, 343-3242. This will be our last meeting until September.

17 May, Sun.

WILDFLOWER SHOW. Wildflower Festival at the Mount Pisgah Arboretum in Buford Park, off Seavey Loop Road. Wildflower display by Emerald Chapter NPSO, posters, notecards and T-shirts for sale, food, plant sale, puppet show, guided trail walks, music, books for sale, etc. 10 am to 4 pm. If you can help collect or help set up the show on Saturday, May 16, please call Jenny Dimling at 343-3242, or show up at the Arboretum on Saturday. Thanks!

30 May, Sat.

FIELD TRIP: Tour the H. J. Andrews Experimental Forest near Blue River with Site Director Arthur McKee. Both contemporary research and "New Forestry" techniques will be viewed. Depart at 8:30am from the parking lot of South Eugene High School, corner of 19th & Patterson. For more information call John Koenig (935-7677).

High Desert

2 May, Sat.

FIELD TRIP: The Lawrence Memorial Grasslands Preserve. The Nature Conservancy owns and manages this 400-acre preserve which features a climax stand of native Oregon bunchgrasses and wild flowers. This will be an easy-to-moderate four-mile roundtrip hike to view the native meadow-steppe ecosystem. For more information contact trip leader Stu Garrett (389-6981 eves).

16 May, Sat.

FIELD TRIP: The Painted Hills/John Day Fossil Beds National Monument. This area is managed by the National Park Service. As one of three national monuments, in Oregon, it preserves not only important aspects of biological diversity in the form of several rare plants, but it also protects amazing geological resources. Easy hiking. For more information contact trip leader Stu Garrett (389-6981 eves).

Mid-Columbia

6 May, Wed.

MEETING. 7:30pm at the Mosier School. "Botanical Gardens and Native Plant Preservation". Linda McMahan, Executive Director of the Berry Botanic Garden, will give a slide presentation on the techniques used by botanical gardens to preserve native plants, including seed banks, research, and off-site living collections.

North Coast

16 May, Sat.

FIELD TRIP: Hike at Cascade Head. Call Jim Winslow (842-2246) for details.

26 May, Tues.

MEETING. 7pm at the Carl Rawe Meeting Room, Tillamook PUD, 1115 Pacific, Tillamook. Program to be announced.

Portland

2 May, Sat.

FIELD TRIP: Ridgefield Wildlife Refuge. Leave 8am from the Jantzen Beach Safeway parking lot. or meet 8:30am at the preserve entrance. It is approx. 20 miles to Ridgefield exit off I-5. The preserve is located on the NW edge of Ridgefield, Wash. Bring boots, binoculars, and lunch.

- 9 May, Sat. **FIELD TRIP:** McCord Creek in the Columbia River Gorge. Leave at 8am, southwest corner of K-Mart parking lot at 122nd and Sandy. 60 mile roundtrip. Two trails available, hiking distance variable. Call George Lewis (760-2316) eves for more information.
- 12 May, Tues. **MEETING.** 7pm at First United Methodist Church, 1838 SW Jefferson St., Portland. John Christy of The Nature Conservancy will give a presentation on "Wetlands in Oregon".
- 24-25 May, Sun-Mon. **FIELD TRIP:** Memorial Day weekend with the rich botany of Curry County. Meet at 8am at the Gold Beach Ore. Forest Service office (south end of Gold Beach) both days. Gold Beach is 300 miles from Portland. This weekend will be busy so make motel reservations soon. Contact George Lewis (760-2316) eves for brochures.
- 30 May, Sat. **FIELD TRIP:** Hamilton Mountain loop and Hardy Ridge. Leave at 8am both days from the southwest corner of K-Mart parking lot at 122nd and Sandy. 45 minute drive each way. Up to 2500' elevation gain. Call George Lewis (760-2316) eves for more information.
- 7 June, Sat. **FIELD TRIP:** Saddle Mountain. Meet at 8am in front of the Forestry Center next to the Washington Park Zoo. Drive 1.5 hour each way, hike is 4 miles with under 3000' elevation gain.

Siskiyou

- 8 May, Fri.. NOTE change of day! **MEETING.** 7:30pm in Room 171 of the Science Building at Southern Oregon State College. Frank Callahan, native plant expert, will talk on the genus *Calochortus* (mariposa or sego). For information, call David Kennedy (535-6383).
- 23 May, Sat. **FIELD TRIP:** Flat Creek scabland on the Prospect Ranger District. A Wildflower Week activity, jointly sponsored by the NPSO and the Rogue River National Forest. Wayne Rolle, RRNF botanist, will lead a non-strenuous stroll. Meet at Food-For Less parking lot on Biddle Road in Medford at 9am or at Prospect Ranger Station at 9:45am. For information call Wayne Rolle (482-0093).

Umpqua Valley

- 14 May, Thurs **MEETING.** 7pm, Room 311 of the Douglas County Courthouse, Roseburg, OR. Ted Schattenkerk, our new president, will review high desert and alkali area vegetation on our June 5 field trip on the way to the annual meeting. For information call Richard 673-3709.
- 23 May., Sat **FIELD TRIP.** To King Mountain Rock Garden via Wolf Cr, Coyote Cr to see *Fritillaria glauca*, *F. recurva*, *Lewisia pygmaea* var *nev.*, *Anemone oregana*. Meet 7:45 am BLM parking lot, 777 Garden Valley Road for carpooling, leave 8 am.
- 5 June., Fri. **FIELD TRIP.** To Malheur Field Station via Diamond Lake Hwy 138, Hwy 97 to La Pine, Hwy 31 to Fort Rock, Christmas Valley, Silver Lake, Hwy 395 Wagon tire, Burns with stops along the way to view vegetation in the high desert and in alkali areas. Meet 7:45 am BLM parking lot, 777 Garden Valley Road for carpooling, leave 8 am. Our leader, Ted Schattenkerk, spent many years in these areas doing plant surveys.
- 13 June., Sat **FIELD TRIP.** To Hemlock Meadow up North Umpqua's Little River to view Klamath Fawn Lily, *Erythronium klamathense*. Meet 7:45 am BLM parking lot, 777 Garden Valley Road for carpooling, leave at 8 am.

Willamette Valley

- 2 May, Sat. **FIELD TRIP:** Clint Urey, one of the original founders of the Willamette Valley Chapter of the NPSO, will lead us in a walk around Independence Rock to view many beautiful wildflowers including the exotic blooms of fairy-slipper orchids. Call Clint Urey (581-1805) for place and time.

9 May, Sat.	exotic blooms of fairly-slipper orchids. Call Clint Urey (581-1805) for place and time. FIELD TRIP: Margie Willis will lead a 3 hour wildflower walk at Silver Falls State Park. We will meet at 2pm at the lodge in the park. This will be the same weekend that a wildflower show is held at the park, so plan to come early and see the show and then join our hike to the lower falls! You could turn around early and make this a short 1 hour walk. For information, call Margie (364-7772) or Kathy Connelly (393-1834).
18 May, Mon.	MEETING/FIELD TRIP: Meet at 6:30pm in the parking lot of the Safeway located on Edgewater Road in West Salem to carpool to the Delbert Hunter Arboretum in Dallas. Or meet us at the entrance to the Arboretum in Dallas around 7pm. Members of the Delbert Hunter Arboretum will join us in a tour of the grounds. They have emphasized native plants in the assemblage of this beautiful garden. For more information call Kathy Connelly (393-1834).
23-25 May, Sat.–Mon.	FIELD TRIP: Memorial Day Weekend joint to Southwestern Oregon with the Portland Chapter. For further information, contact Wilbur Bluhm (393-2934).

William Cusick

23 May, Sat. FIELD TRIP: Kent Coe will lead a walk at the Wallowa-Whitman National Forest's Blue Mountain Crossing of the Oregon Trail Interpretive Area as a commemoration of Wildflower Week. Take a lunch and plan to leave from the LaGrande Safeway parking lot at 8:30am. For more information call Kent (962-7049).

New State Officers

The Nominating Committee has received the results of the 1992 elections. Newly elected Officers and Directors at Large are listed below. Installation will take place during the Annual Meeting Banquet on Saturday June 6th. Information about the annual meeting is available in the *Bulletin*.

The Nominating Committee would like to extend its thanks to everyone who ran for a position. Your willingness to serve NPSO in this manner is greatly appreciated.

President.....	Lisa Croft
Vice-President.....	Dan Luoma
Secretary.....	Bruce Rittenhouse
Treasurer.....	Nancy Wogen
Directors at Large.....	Jerry Igo
	Margie Willis
	Peter Zika

New Officers for the Portland Chapter

President John King
First Vice-President (programs) . . . Linda Hardie-Scott
Second Vice-President (field trips) . George Lewis
Secretary Rosemary Kenney
Treasurer Jean France

New Officers for the Willamette Valley Chapter

President.....	Kathy Connelly
Secretary.....	Tom Jenkins
Treasurer.....	Roy Blomgren

New Officers for the Umpqua Chapter

President.....Ted Schattenkerk

New Officers for the Siskiyou Chapter

President.....	David Kennedy
Vice-President	Anita Seda
Vice-President	Linda Knight
Secretary-Treasurer	John McClendon
Publicity	Virginia & Paul Lemon
Conservation.....	Darlene Southworth
R & E.....	Rick Prusz

New Officers for the High Desert Chapter

President..... Cindi O'Neil
Secretary-Treasurer Stu Garrett

LEGISLATIVE NOTES: UPDATE ON THE RULE-MAKING FOR HB 2244 ON CYANIDE HEAP LEACH MINING

When HB 2244 passed the 1991 Oregon legislative session four state agencies were given the responsibility for developing rules to govern chemical process mining, which means cyanide heap leach mining, in the state. The Department of Geology and Mineral Industries (DOGAMI), the Water Resources Department (WRD), the Oregon Department of Fish and Wildlife (ODFW), and the Department of Environmental Quality (DEQ) have all been engaged in rule-making to implement and hence interpret the new laws. The rule-making was originally supposed to be completed by Dec. 31st, 1991. DOGAMI adopted its rules on Nov. 1st, 1991. DOGAMI is the 'facilitating' or lead agency in the chemical mining application process. Its rules are lengthy and complex but satisfactory except in a few sections. ODFW adopted its rules on Dec. 18th, 1991. The ODFW rules are strong with a few exceptions. The WRD adopted its rules on Dec. 20th, 1991. Their rules are the least controversial and deal mainly with procedural issues. The DEQ began its rule-making before the conception of HB 2244 under its water quality authority, but is the only agency that has not adopted chemical process mining rules.

The DEQ originally scheduled to adopt rules Dec. 13th, 1991. Their draft rules issued spring 1991 were fairly strong. I wrote a letter in support of them. The second draft was greatly weakened and did not even look like the first. The third draft, which I never received, was strong from what I hear. This third draft was not adopted because the mining industry has requested a review of the rules. When I heard about the problems I drafted a letter of concern about the key issues that are presently under debate. The three key areas that are under review are the liners, the covers, and detoxification. The mining companies do not want stringent guidelines in these three areas.

The final rules adopted by the DEQ must set high standards for protecting our state from the sorts of environmental damage this technology has inflicted in Nevada and elsewhere. The final rules must include consistent, long-term monitoring to prevent leakage of toxic chemicals or heavy metals into the environment. Monitoring for leaks must be required to be frequent during and after the operation of the mine. There must be protection of

both ground and surface water from contamination by acidified water accumulation. Processing solutions, heavy metals, and other by-products must be monitored so that leaks can reliably be found, and once found be contained at once. Toxic chemicals, heavy metals, and acid water buildup cannot be allowed to migrate through the soil into the ground or surface waters of our state.

If soils or the available water resources become contaminated with cyanide, heavy metals or other toxins associated with this form of mining, then there is a likelihood that plants and animals in the area will take up these contaminants. In other cyanide mining areas this has had fatal results. Once in the food chain such contaminants will have detrimental effects on the natural ecosystem. Letters are needed to support the adoption of strong, effective rules by DEQ. Please write in the next six weeks to:

Fred Hansen, Director
State of Oregon
Department of Environmental Quality
811 SW 6th Ave.
Portland OR 97204

Ask in your letter that Mr. Hansen distribute your letter to all the members of the DEQ before final adoption of the proposed chemical process mining rules.

--Esther McEvoy
Legislative Chair



Juniperus occidentalis
Western juniper
Drawn by Ramona Hammerly
from Northwest Trees

OREGON'S NATURAL DIVERSITY

The simplest way to measure the natural diversity of an area is to count the number of different native organisms. Another consideration in evaluating an area's value for biological diversity is the number or percentage of organisms that are "endemic"; organisms with local distributions found nowhere else in the world. The numbers of native and endemic species are very high in Oregon.

VERTEBRATES: Oregon harbors about 750 species of native vertebrate animals. Over 30% of the states's 155 native mammals are considered local endemics, as are about 14% of the 115 species of freshwater fish and 34% of the 29 amphibians.

Oregon's natural habitats also support a great number and variety of birds. More than 440 bird species are recorded from Oregon, with 57% of all North American birds occurring regularly in our state.

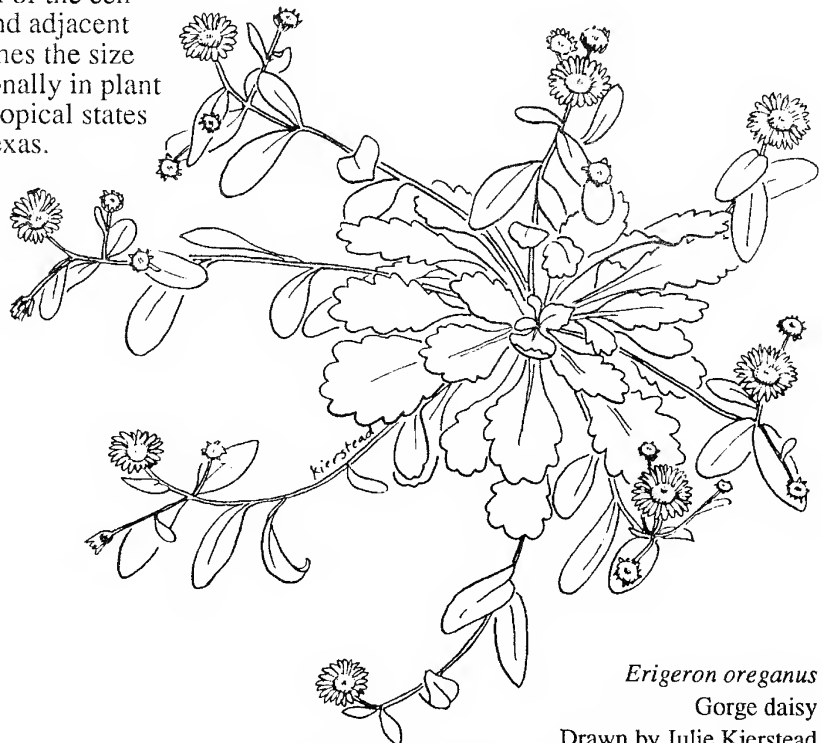
VASCULAR PLANTS: Almost 3,500 taxa of native vascular plants are found within Oregon. This is 75% of the species which occur in all of the central and northeastern United States and adjacent Canada, an area more than twenty times the size of our state. Oregon ranks fifth nationally in plant diversity, behind the subtropical or tropical states of California, Hawaii, Florida and Texas.

OTHER SPECIES: The number of invertebrate animals, nonvascular plants, and microorganisms native to Oregon have been estimated for only a few groups. As an example of the rich diversity yet to be fully measured, it is estimated that Oregon is home to about 25,000 species of native insects—roughly equivalent to a quarter of all species known to inhabit America north of Mexico.

NATURAL COMMUNITIES: In addition to plant and animal species, Oregon possesses a remarkable number and variety of natural communities. These communities are assemblages of plants and animals that have a recognizable composition and structure, and recur predictably in certain habitats over certain geographic areas. Familiar examples include Port Orford cedar forest, ponderosa pine woodland, sagebrush steppe, coastal dunes grasslands, wet montane meadows, mountain streams and kelp beds.

Oregon's varied topography, changing climates and complex mosaic of natural habitats promotes this rich and unique diversity. It is this diversity that makes Oregon such a wonderful place to live—and such a challenge to protect.

--From the Oregon Natural Heritage Program



Erigeron oregonus
Gorge daisy

Drawn by Julie Kierstead
From NPSO 'Oregon Rare and Endangered Plants'
postcard series

SATURDAY FIELDTRIPS FOR THE '92 NPSO ANNUAL MEET

All field trips are Sat., June 6th, and will leave from the Field Station parking lot at 8:15am after breakfast. We will carpool. Bring lunch (which can be provided by the field station with preregistration), warm clothes, raingear, and good hiking boots. A high clearance car is best. As distances are great, we will need to be sure everyone is back for the banquet at 6:30pm.

THE NARROWS ACEC/STEPHANOMERIA EXCLOSURE

This site contains the only known location for one of Oregon's three federally listed endangered plants, the Malheur wirelettuce. We will hopefully be able to see this annual in bloom, learn of the recovery plans by BLM/USFWS, and survey for new plants. This spot is a 15 mile drive from the Field Station and walking will be easy. Leader will be Nora Taylor of the BLM.

GREAT BASIN/PAIUTE ETHNOBOTANY

Ethnobotanist Lucile Housley will lead us to the Stinkingwater Pass area where traditional native American uses of local plants will be discussed. 2-hr. drive one way & a moderate 2-4 mile hike.

PONDEROSA PINE ANCIENT FORESTS

USFS ecologist Bill Hopkins will take us to the southernmost Blue Mountains to see and discuss the ecology of the remnant stands of Oregon's yellow-bellied pine forests. Driving time is 1 1/2 hours each way and hiking is 2 to 4 miles.

BOTANIZING AND BIRDING THE MALHEUR REFUGE

The Malheur NWR is known as one of the best birding spots in the nation. Accomplished natural historians, Dick and Marge Ettinger will share some of their favorite birding areas and look at some of Malheur's native marsh vegetation on this trip down the Center Patrol Road. A nice mix of driving and easy walking.

RIDDLE RANCH/ROOSTER COMB RNA

This area on the Little Blitzen River has recently been acquired by the BLM. There is much history and good botanizing in this area. This ranch is located on the lower slopes of magnificent Steens Mountain. Lead by BLM personnel.

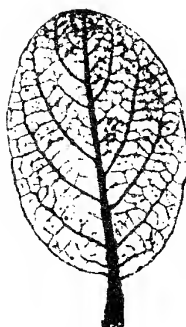
A DIFFERENT APPROACH TO RANCHING

The Fred Otley family has agreed to show us their approach to current ranch management. We will see how juniper control, prescribed fire, rotation grazing, and riparian protection are utilized by this ranching family with early roots in Harney County. A combination of moderate hiking and driving. Leader will be Stu Garrett.

MARSH RECOVERY

Botanist Sherry Spencer of PSU has been studying the recovery of lowlands from the flooding of the 1980's. Join her to see receding floodwaters and revegetation on the refuge. A short drive with moderate walking.

1
cm



THE PLANT PUZZLE

Sponsored by the Siskiyou Chapter

Do you recognize this plant? The first person to give the correct scientific name will win a prize. The illustrated leaf is from a native woody species.

Send your guess on a postcard to:
Peter Zika
4230 NW Clubhouse Pl. #1
Corvallis, OR 97330

Bruce Newhouse of Eugene was first to solve the April puzzle:
Douglas' spirea, *Spirea douglasii*.

BITS AND PIECES

---NEWS AND INFORMATION FROM ALL OVER

AGRICULTURE DEPARTMENT GETS GOING ON ASIAN GYPSY MOTH

After some procedural delays, the USDA is supporting state agricultural departments on the West Coast in spraying *Bacillis thuringiensis*, which is deadly to caterpillars, to eradicate Asian gypsy moths. 9600 acres in North Portland and 116,000 acres in the Seattle-Tacoma area, as well as additional areas in Vancouver, British Columbia, are being sprayed with the organic pesticide. Other measures being taken against the moth include banning ships from entrance who have visited the Siberian ports known to be infested with it. The threat of the moth should mean that log imports from Siberia are to be banned.

The target of this is the Asian gypsy moth caterpillar, which is one of the most versatile consumers of green, growing matter around. With a menu of well over 500 species of native and introduced plant species to choose from, it has little problem finding enough to eat. The environmental threat posed by the Asian gypsy moth is twofold: by stripping our forests (as it has done in Asia) it will devastate them and alter forever the ecological balance which has existed before, and by eating both our crops and forests it will encourage widespread applications of chemicals for economic reasons. Reports from its Siberian homeland indicate that whole forests are consumed by the moth, with trees breaking from the weight of the massed insects. Unlike its close cousins native to Europe, which only glide from tree to tree to lay eggs, the Asian gypsy moth can fly 20 miles to lay eggs. Because of this, once it is established a season, control of the insect will be impossible.

Bacillis thuringiensis originally gained acceptance with government agencies due to environmentalists' lawsuits over harmful chemical pesticides once widely used to control insects. This insecticide produces a disease of caterpillars, and is not a toxic chemical, and occurs naturally in some parts of the world. It first came into commercial production in the 1950's. It has been sprayed in large scale projects successfully over rural and urban areas for years. The negative ecological impact of the spray is that it is not specific only to this insect, but is fatal to all types of moths and butterflies.

LAND MANAGEMENT AGENCY PUBLICATIONS

Both the Bureau of Land Management and the US Forest Service are now publishing newsletter style periodicals with the purpose of increasing public awareness of agency activities and aims. They vary in content and in size from 6 to 50 pages.

The Pacific Northwest Region of the US Forest Service puts out *Greensheet, News of the Forest Service in the Pacific Northwest*. This publication is directed by Forest Service workers towards other Forest Service workers, but contains plenty of general interest information. The February issue, for instance, contains a good quick overview of forest health and fire management related issues for the east side. The average article is short, about 250 words, creating a light feel to the publication, but plenty of interesting tidbits of information are squeezed into those short, to-the-point articles.

Mount Hood National Forest has two publications serving different purposes. One is a general interest opus, while the other covers planning issues. *Mountain Views* in a recent issue has good articles on the spruce budworm and the Falls Fire, among others. Also included is some recreational information. It is aimed at the interested forest user and at those wishing to use the forest for educational purposes. *Sprouts* is subtitled *New Plans for the Mt. Hood National Forest*. It includes information about upcoming Environmental Impact Statements, Environmental Assessments, rehabilitation and enhancement projects, timber sales, prescribed burns, grazing allotments, replanting projects, and ski area improvements, among others. Any planning for specific development or use of the National Forest is included in their extensive listing. This is a valuable resource for anyone wishing to follow such issues in this area.

The Bureau of Land Management's Burns District puts out the *Burns District Planning Update*. This 50 page output is not issued regularly but aims at a yearly appearance. Its articles contain much basic information, and most articles contain a contact person's name and phone number to get additional information. The magazine-style publication covers both recent accomplishments and proposed ones.

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 KALMIOPSIS EDITOR Frank Lang. 535 Taylor St., Ashland 97520; W-552-6341; H-482-5235

GUIDELINES FOR CONTRIBUTORS

The NPSO *Bulletin* is published monthly as a service to NPSO members and the public. Contributions of all types are welcome.

DEADLINE: Copy is due with the editor by the 10th of each month. Submissions can be in any form. Author's name & affiliation are at the end of the article. Double space between paragraphs. For special materials (e.g., plant keys) choose an appropriate format, keeping in mind that readers may wish to carry your article pasted inside their favorite field guide. Formatting assistance is available from your editor. All *Bulletin* articles now go into the new NPSO database via computer. Camera-ready copy is not used, with rare exceptions.

Computer output: The editor prefers articles submitted on Macintosh or IBM disks, or via modem. Contact the editor for details.

Illustrations: Line drawings, prints, and high contrast B&W prints are useable. Some Macintosh graphics can be used also. Contact the editor about our current needs, or send them along with your article.

Credits: If the item is not original, name and date the source. For original items, identify the author and indicate, for news items, if a by-line is desired. Indicate whether the item is to be used in its entirety or excerpted at the editor's discretion.

Scientific Names: Nomenclature should follow *Flora of the Pacific Northwest*, by Hitchcock et al., when appropriate. Use both scientific and common names if possible. *Italicize* genus and species, or underline.

Return of Originals: Submissions are not returned unless requested.

Membership in the Native Plant Society of Oregon is open to all.

Membership applications, renewals, and changes of address (include old address and zip code) should be sent to the Membership Chair.

NATIVE PLANT SOCIETY OF OREGON MEMBERSHIP FORM

Name _____

Chapter (if known) _____

Address _____

Is this a change of address?

If so, please write your *Old Address* here:

City _____ State _____ Zip+4 _____ - _____

Phone (Home) _____ (Work) _____

City _____ State _____ Zip _____

* **DUES** include monthly NPSO *Bulletin*. Full membership is for a calendar year, January through December. New memberships enrolled during September through December are charged a reduced "Quarter Membership" rate.

() New	() Renewal	() Quarter Membership (Sep.-Dec.)	\$3.00	() <i>Bulletin</i> Subscription only	\$12.00
() Student			\$ 8.00	() Sustaining	\$ 30.00
() Regular			12.00	() Patron	100.00
() Family Membership			18.00	() Life Member	500.00

* CONTRIBUTIONS:

Jean Davis Memorial Award Fund. \$ _____
 Leighton Ho Memorial Award Fund. \$ _____
 Rare and Endangered Plant Fund. \$ _____

* All contributions to the Native Plant Society of Oregon, a non-profit organization, are tax deductible. Please make checks for dues and contributions payable to NATIVE PLANT SOCIETY OF OREGON. Send completed form and full remittance to:

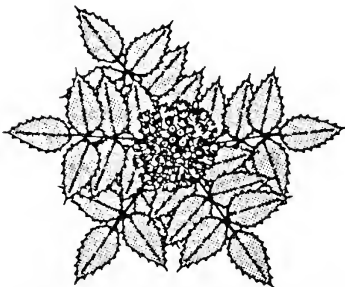
Jan Dobak, NPSO Membership Chair, 2584 NW Savier St., Portland OR 97210-2412.

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*Send change of address notices
and membership requests to:*
Native Plant Society of Oregon
Jan Dobak, Membership Chair,
2584 NW Savier St.,
Portland, Oregon 97210-2412

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Bulletin of the
**NATIVE PLANT SOCIETY
OF OREGON**

Dedicated to the enjoyment, conservation, and study
of Oregon's native vegetation

VOLUME 25 NUMBER 6

JUNE 1992

ISSN 0884-599

Native Plant Society of Oregon PO Box 902, Eugene OR 97402

Membership inquiries: Jan Dobak, Membership, 2584 NW Savier St., Portland OR 97210-2412

For more society information, see the inside back cover.

IMPORTANT NOTE TO FIELD TRIP PARTICIPANTS:

Field trips take place rain or shine, so proper dress and footwear are essential. Trips may be strenuous and/or hazardous. Please contact the trip leader for information about difficulty, mileage, and terrain. Participation is at your own risk. Bring water and lunch. All NPSO activities are open to the public at no charge (other than carpool mileage), and friends, newcomers and visitors are always welcome.

Notice to field trip chairs and leaders: The Forest Service and other Federal agencies have set policies limiting group size in wilderness areas to 12. The reason for this is to limit the human impact on these fragile areas. Each group using wilderness must be no larger than 12.

STATE NEWS

5-7 June, Fri.-Sun.

ANNUAL MEETING. See you at Malheur Field Station! See last month's *Bulletin* for details.

7 June, Sun.

STATE BOARD MEETING. 10am. All invited. This will take place at the Annual Meeting at Malheur Field Station.

CHAPTER NEWS

Blue Mountain

6 June, Sat.

FIELD TRIP to Ruckle Ridge with Karl Urban in search of mountain ladyslippers and other beauties. Trip leaves BMCC greenhouse at 8am.

13 June, Sat.

FIELD TRIP to the Woodward Campground on Weston Mtn. with Karl Urban to visit the botanical area there. Trip leaves BMCC greenhouse at 8am.

11 July, Sat.

FIELD TRIP to Indian Rock above Olive Lake in Grant County, elevation 8000 ft. The leader of this trip will be Harry Vincett. Note!: This trip leaves BMCC greenhouse at 7am.

Corvallis

9 June, Tues.

MEETING. 7:30pm, Corl House, Woodland Meadow Park (Witham Hill / Circle). Don Eastman will give an illustrated talk on rare plants. Anyone interested in forming a Chapter Conservation Committee should come early, at 7:10pm. Contact Duncan Thomas (752-6529) for more information.

27 June, Sat.

FIELD TRIP : Wildflower Week will be observed with a joint Corvallis / Emerald chapter trip to Iron Mountain in the Sweet Home Ranger District to view the abundant wildflowers of the area. Trip leaders are Dan Luoma and Jenny Dimling. Bring lunch, drink and hiking shoes. Depart at 7:30am from the parking lot across from the Monroe Street Beanery, or meet at the Iron Mountain trailhead on Hwy. 20 at 9am. For more information call Esther McEvoy (754-0893).

Emerald

27 June , Sat.

FIELD TRIP: Wildflower Week will be observed with a joint Emerald/Corvallis chapter trip to Iron Mountain in the Sweet Home Ranger District to view the abundant wildflowers of the area. Trip leaders are Dan Luoma and Jenny Dimling. Bring lunch, drink and hiking shoes. Depart at 7:30am from the parking lot of South Eugene High School, corner of 19th and Patterson, or meet at the Iron Mountain trailhead on Hwy. 20 at 9am. For more information call Jenny (343-3242).

18 July , Sat.

FIELD TRIP: Evelyn Everett will lead a trip to view high elevation wildflowers at Bristow Prairie and Bradley Lake, along the Calapooya Divide, in the Rigdon Ranger District of the Willamette National Forest. These are both Forest Service Special Interest Areas. Bring lunch, drink and hiking shoes. For more information call Evelyn (345-1746).

High Desert

18 July , Sat.

FIELD TRIP: Forest Health and Sustainable Forest Management. Areas of the conifer forests of central and eastern Oregon have been called "ecosystems in collapse". We will see conditions that have led to this problem and understand the natural forces at work. Entomologists from the Deschutes National Forest will accompany us. Depart from Juniper Park parking lot near the tennis courts at 7th and NE Franklin Ave. in Bend at 8:30am sharp. Trip leader: Stu Garrett (389-6981 eves).

Mid-Columbia

3 June, Wed.

MEETING. 7:30pm at the Mosier School. Feature presentation "What is so Rare?" by Jerry Igo, 'plant enthusiast extraordinaire', with highlights from preliminary survey work done along Oregon Highway 197 south from The Dalles to Tygh Valley...including some specifics on *Astragalus tyghensis*.

1 July, Wed.

MEETING. 7:30pm at the Mosier School. Lisa Lantz from the OSU Botany Department, will report on her research grant partially funded by the Mid-Columbia Chapter. The focus species is *Amsinckia carinata*, the Malheur Valley fiddleneck, which is endemic to the distinctive talus outcrops around Harper. It is listed as a threatened species by Oregon and is a candidate for federal listing as well.

North Coast

20 June, Sat.

FIELD TRIP: Easy 1/2 mile walk along the North Fork of the Wilson River. Meet at 10am at PUD parking lot for carpooling. Bring lunch. Call Jim Winslow (842-2246) for details.

30 June, Tues.

MEETING. 7pm at the Carl Rawe Meeting Room, Tillamook PUD, 1115 Pacific, Tillamook. Program to be announced.

Portland

6 June, Sat.

FIELD TRIP: Saddle Mountain. Meet at 8am in front of the Forestry Center next to the Washington Park Zoo. Drive 1.5 hour each way, hike is 4 miles with under 3000' elevation gain.

9 June, Tues.

MEETING. 7pm at First United Methodist Church, 1838 SW Jefferson St., Portland. Linda Hardie-Scott will present a slide program featuring the subalpine and alpine wildflowers of the Cottonwood Lakes Basin in the Southern Sierra Nevada Mountains near Mount Whitney.

13 June, Sat.

FIELD TRIP: Fish Creek Mountain in the Clackamas River drainage. Moderate hike to the 5098 ft. summit. Elevation gain 1400 ft., 4.2 mile round trip. Good views and displays of dry-site wild flowers. Leader Bryan Boyce (655-4457). Leave at 8:30am from K-Mart lot at 122nd & Sandy.

20 June, Sat.

FIELD TRIP: For Columbia River Gorge Appreciation Weekend, the Portland Chapter will jointly sponsor with the Friends of the Columbia Gorge a moderate hike of 6.5 miles on the Pacific Crest Trail past Gillette Lake to the Greenleaf Basin overlook. Leave at 8:30am from the DOT lot at 60th & Glisan, or at 9:30am from the trailhead across from Bonneville Dam on Washington State Route 14 (2 miles west of the North end of The Bridge of the Gods). Leader is Carroll Dubuar (234-4135).

16 June, Tues

FIELD TRIP: Indian Springs near Wahtum Lake. Leave at 8am from K-Mart lot at 122nd & Sandy.

27 June, Sat.

FIELD TRIP: Blue Lake Ridge in the Coast Range, eastern Tillamook County. *Lewisia* may be in bloom. Leave 8am from the Forestry Center, next to the Washington park zoo. Leader is George Lewis (760-2316)

Siskiyou

20 June, Sat.

FIELD TRIP: Barbara Mumblo, botanist for the Applegate District, Rogue River National Forest, will lead a car trip to Donomore Meadows and Alex Hole, both at high elevations on the California side of the Applegate District. Minimum hiking. Leave from Ashland BiMart at 8:15am, Medford K-Mart at 8:30am, or Applegate Ranger Station at 9:15am. For information call Barbara Mumblo (899-1812).

Umpqua Valley

5 June., Fri.

FIELD TRIP. To Malheur Field Station via Diamond Lake on Hwy 138, Hwy 97 to La Pine, Hwy 31 to Fort Rock, Christmas Valley, Silver Lake, Hwy 395 Wagon Tire, Burns with stops along the way to view vegetation in the high desert and in alkali areas. Meet 7:45 am BLM parking lot, 777 Garden Valley Road for carpooling, leave 8 am. Our leader, Ted Schattenkerk, spent many years in these areas doing plant surveys.

13 June, Sat

FIELD TRIP. To Hemlock Meadow up North Umpqua's Little River to view Klamath Fawn Lily, *Erythronium klamathense*. Meet 7:45 am BLM parking lot, 777 Garden Valley Road for carpooling, leave at 8 am.

20 June, Sat

FIELD TRIP. Hunter Creek Bog and Springs proposed ACEC. Bruce Rittenhouse, District Botanist with the Coos Bay BLM, and Veva Stansell, District Botanist with the Gold Beach Ranger District, will lead this field trip to these unique serpentine bogs and springs to observe *Darlingtonia californica*, *Cypripedium californicum*, *Gentiana setigera*, *Allium bolanderi*, *Poa piperi*, and *Hieracium bolanderi*. We will meet at the Gold Beach Ranger District office at 9:30am. For more information call Bruce Rittenhouse at 756-0100 ext. 225.

Willamette Valley

5-7 June, Fri.-Sun.

NPSO ANNUAL MEETING, Malheur Field Station. Field trips on Sat., June 6.

13 June, Sat.

FIELD TRIP: A tour of wildflower areas between Highways 22 and 20 with short, easy, floristically rich hikes at Tombstone Prairie and the Park Creek area. Call Wilbur Bluhm (393-2934) for place and details.

15 June, Mon.

MEETING / FIELD TRIP: Join us to visit Russ Graham's native plant nursery in West Salem. We will meet at the West Salem Safeway (off Edgewater Street) at 6:30pm to carpool to the nursery. For information, call Wilbur Bluhm (393-2934) or Kathy Connelly (327-1212).

20 June, Sat.

FIELD TRIP: We're off to the wetlands at Fanno Meadows, high in the Coast Range west of Dallas, Ore. For more information call Wilbur Bluhm (393-2934).

23 June, Tues.

FIELD TRIP: It's a midweek trip to Pigeon Prairie and the Triangulation Peak trail in the central Cascades. Call Barbara Halliday (371-1025) for details.

27 June, Sat.

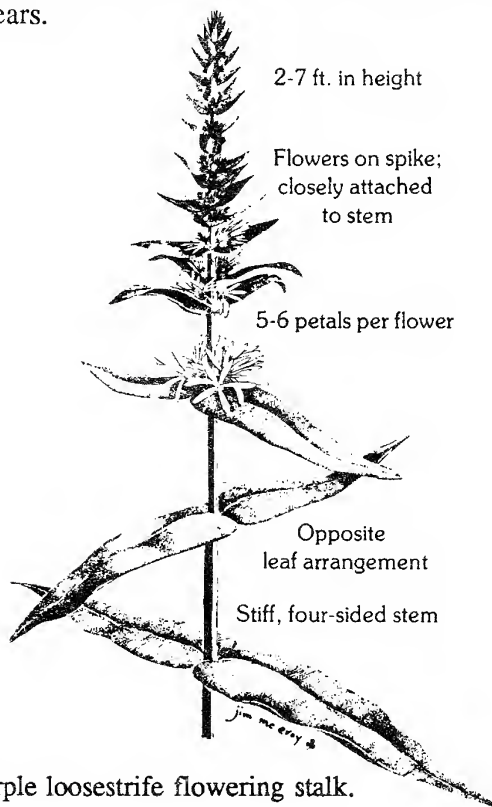
FIELD TRIP: This trip is to one of the most outstanding wildflower areas of the Old Cascade Mountains—Cone Peak and Iron Mountain! Call Barbara Halliday (371-1025) for details.

William Cusick

For information, call Bob Ottersburg (963-4907).

HAVE YOU SEEN PURPLE LOOSESTRIFE IN YOUR AREA?

Purple loosestrife, *Lythrum salicaria* L. (of the *Lythraceae*), is native to Eurasia, but has been known from North America since the early 1800s. Likely first introduced as a horticultural plant, it has since become an aggressive weed and has spread steadily across the continent from the St. Lawrence and Hudson River Valleys through the Great Lakes Region and, recently, into the Pacific Northwest. It easily becomes established along the edges of rivers and lakes, in roadside ditches and irrigation canals, and in low wet meadows and marshes — generally in areas with high moisture levels in the spring. Once established, it can be very tolerant of subsequent dry conditions and under the right conditions, a site with only a single mature plant can grow to a virtual monoculture covering several hectares in just two to three years.



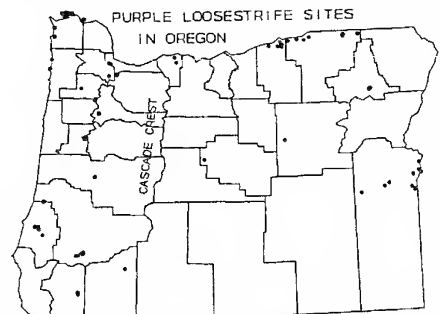
Purple loosestrife flowering stalk.

Purple loosestrife's invasive tendencies and ability to form extensive monocultures have deleterious effects on native plant communities and wildlife, and on agriculture. It crowds out native vegetation while offering little food or cover value for wildlife. The dense stands impede water move-

ment in irrigation canals and drainageways. For these reasons, purple loosestrife has been placed on the noxious weed list of many states. Washington, Minnesota and Wisconsin, among others, have enacted legislation banning its cultivation, transport and sale commercially or privately.

The Oregon Department of Agriculture's Weed Control Program has recognized purple loosestrife as a serious threat to our wetlands and has instituted measures to control its spread before it reaches the infestation levels already present in other states. These measures include developing a public awareness / outreach program to alert individuals to the problem, supporting research at both Oregon State and Cornell Universities on the potential for using insects as biological control agents, and the development and maintenance of a comprehensive database on purple loosestrife populations throughout the state. This database is currently maintained at OSU and is designed to track the spread and / or containment of purple loosestrife over several years and to provide information to researchers for the development of a statistically designed release and monitoring program of biological control agents for purple loosestrife.

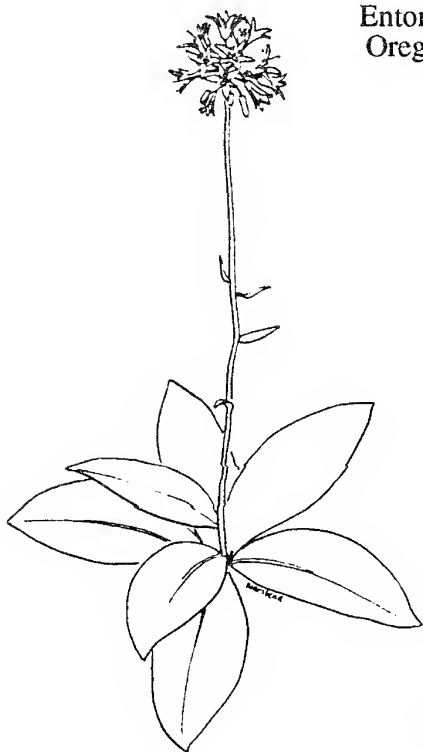
Herbarium records in the state show that purple loosestrife has been known to Oregon since at least 1952, and its distribution is rapidly expanding. An extensive survey of purple loosestrife populations throughout the state was conducted during its flowering period (late July through early September) last year. Over 100 sites in 23 of the 36 counties were found, with a total coverage of approximately 140 hectares. It occurs in all of the major waterways in the state, in marshes,



creeks, wet pastures, and roadside ditches, and, unfortunately, even in people's gardens and commercial nurseries. Although it is a wetland plant, it occurs in many of the driest counties of the state, and the many other likely areas for future establishment will need to be monitored carefully.

The Oregon Department of Agriculture is supporting the purple loosestrife survey again this year, and in order to make it as accurate and complete as possible, I would like to request the help of the members of the Native Plant Society of Oregon. Purple loosestrife is a perennial plant found mostly in moist or marshy areas, reaching heights of 8 feet or more. Its leaves are simple, entire and opposite or whorled. It flowers in late summer producing long spikes of rose-purple flowers with 5 to 7 petals each. At a glance, it can resemble fireweed (*Epilobium angustifolium*) or Douglas' spiraea (*Spiraea douglasii*) but is easily distinguished from these by habitat, smooth leaf margins and flower spikes rather than racemes or panicles. A form for reporting purple loosestrife population sightings is provided at the end of this article. If you are aware of a purple loosestrife site, please complete this form and send it along to the address indicated. Information on this sighting form should be detailed enough that the purple loosestrife population could be relocated by a person unfamiliar with the site. New sightings will be confirmed and added to the data base as they are reported. Your help in locating these sites is greatly appreciated. If you should have any questions concerning the project, please feel free to call me at (503) 737-5534.

—Manuela Huso
Entomology Department
Oregon State University



Clintonia andrewsiana
Red Clintonia

From Oregon Rare and Endangered Plants postcard series
Drawn by Julie Kierstead

PURPLE LOOSESTRIFE REPORT FORM

Name _____

Address _____

City _____ State _____ Zip _____

() _____

Phone _____

Location of Purple Loosestrife Site

County: _____

Township: _____ Range: _____

Section: _____ Quarter: _____

Nearest road or intersection: _____

Nearest town: _____

Please include a map and/or directions to the site.

Survey Dates

Date visited: _____

Was site previously reported by you? ☐ yes ☐ no

If yes, please specify date: _____
month day year

Type of Area

- | | |
|---|---|
| <input type="checkbox"/> Marsh / wetland | <input type="checkbox"/> River |
| <input type="checkbox"/> Meadow / pasture | <input type="checkbox"/> Stream / creek |
| <input type="checkbox"/> Pond / lake | <input type="checkbox"/> Garden |
| <input type="checkbox"/> Drainage ditch | <input type="checkbox"/> Irrigation canal |
| <input type="checkbox"/> Roadside | <input type="checkbox"/> Other: _____ |

Number of Plants

- | | |
|-----------------------------------|--|
| <input type="checkbox"/> 1 - 10 | <input type="checkbox"/> 100 - 1,000 |
| <input type="checkbox"/> 10 - 30 | <input type="checkbox"/> more than 1,000 |
| <input type="checkbox"/> 30 - 100 | |

Estimated area of infestation ft² or acres (m² or ha.): _____

NPSO

Feel free to photocopy this form.

Please complete one form for each patch of purple loosestrife, and mail to:

PLS Survey, Noxious Weed Control Program
Oregon Department of Agriculture
635 Capitol St., N.E.
Salem, OR 97310-0110
(503) 737-5534 or (503) 378-4987

A SUMMARY AND REVIEW OF THE MAJOR REVISION OF THE CASTILLEJINAE—PAINTBRUSHES AND OWL CLOVERS

The following review is abridged from Douglasia, Newsletter of the Washington Native Plant Society, Vol. XVI, No. 1.

Generic Realignment and Synopsis of Subtribe Castillejinae (Scrophulariaceae—Tribe Pedicularae) T. I. Chuang and L. R. Heckard, 1991, in *Systematic Botany* 16 (4):644-666.

This paper represents a landmark in the taxonomic history of the *Castillejinae*, the large group of often colorful and notoriously confusing plants best known for its most prolific members, the paintbrushes (*Castilleja*) and owl clovers (*Orthocarpus*). This 'subtribe' of the large and cosmopolitan figwort family, *Scrophulariaceae*, also includes the more obscure genus *Cordylanthus* (represented east of the Cascades by *C. ramosus* and *capitatus*) and three single species genera of Mexico.

The most sweeping and important changes proposed by Chuang and Heckard involve the reconstitution of the traditional genus *Orthocarpus*, a heterogeneous assemblage of plants that has a long history of taxonomic confusion as to its limits and included species. Some species have gone back and forth from several other genera over the past hundred years. The proposed revisions are based on solid evidence, such as chromosome numbers, seed coat morphology, corolla structure, and other significant features. The revision is also based on an intuitive grouping of clearly defined natural assemblages that is very consistent with field knowledge of the species involved.

The authors propose the reduction of *Orthocarpus* to a group of nine species, which constitutes the core of the traditionally-defined genus. The remaining species are divided into two groups. The first group, composed of 12 species, is merged into the genus *Castilleja*, within the subgenus containing small paintbrushes with equally cleft calyx lobes that have sometimes been placed in the old *Orthocarpus*. The second group is placed into a new genus, *Triphysaria*.

Chuang and Heckard also propose a revision of the subgenus divisions within *Castilleja*. Basically, they erect three major sub-groups: subgenus *Colacus*, with most of the non-reddish, bee or self-pollinated species; subgenus *Castilleja*, with

the many species usually pollinated by hummingbirds and having predominately reddish bract and / or flower coloration; and the single species subgenus *Gentrya*, before this revision a separate genus.

The authors attempt to define further divisions in *Castilleja* only for the subgenus *Colacus*. This subgenus is divided into three sections; section *Oncorhynchus*, to include the 12 annual species moved from *Orthocarpus*; section *Pilosae*, to include the perennial species having an equally cleft calyx and an upper corolla lip the same length as or only slightly longer than the lower lip; and section *Pallescentes*, to include species with a corolla similar to that in section *Pilosae* but with an unequally cleft calyx.

As the authors recognize, subgenus *Castilleja* remains a very large and heterogeneous group that will require much further study to determine precise sectional boundaries. In addition a few problematic species remain that could be in either subgenus *Castilleja* or subgenus *Colacus*. For instance, the intermountain species *C. viscidula* is usually pale yellow-green, with a short upper corolla lip, seeming to place it in *Colacus*. But some populations are quite reddish. Further, many other characteristics link it to a large group of typically long-flowered and hummingbird pollinated species. As Holmgren (1971. Mem. N.Y. Bot. Gard. 21 (4); 1-83) pointed out, *C. viscidula* is probably a primitive species within the group. The question arises to which side of the line such transitional species should be placed. As an isolated entity, *C. viscidula* would probably be listed within subgenus *Colacus*, but that placement would isolate it from a natural assemblage of plants to which it is linked by evolution but which is clearly within the subgenus *Castilleja*. Such are the joys of plant taxonomy!

The changes proposed by Chuang and Heckard have a number of implications for Northwestern botanists wishing to use the most correct names for the plants they observe. The changes proposed are well documented and will likely be accepted by most future authors of floras and other botanical works.

—Mark Egger

CONGRATULATIONS VEVA!!

Veva Stansell, one of our long-time NPSO members from the Gold Beach / Brookings area (Pistol River) received a special National Forest Service award this spring. Veva traveled to Washington, D.C. in April and was presented a "Forest Service National Plaque for Exemplary Service" for her "thousands of hours" of volunteer efforts for the Siskiyou National Forest from 1975 to 1987.

Veva is currently working as a Botany Technician for the Gold Beach Ranger District and is truly one of the most knowledgeable botanists in the state. Veva is a self-taught botanist of extraordinary skill and knows the flora of the Siskiyou intimately. Her knowledge and work are admired and respected by field and academic botanists alike. Among her many contributions as a volunteer: she played a significant part in preparation of all three editions of the comprehensive Guide to the Sensitive Plants of the Siskiyou National Forest; participated in the Forest Planning process; encouraged and assisted in recognizing important plant communities which led to the creation of 19 Botanical Areas on the Siskiyou National Forest; and has lectured and led field trips for civic groups, special interest clubs, and public schools.

Calochortus coxii

Myrtle Creek Mariposa

From Oregon Rare and Endangered Plants postcard series

Drawn by Valerie Sloane

Veva definitely represents "Caring for the Land and Serving People", and she is a terrific representative for the botanists and Native Plant Society of Oregon. Thank you Veva for your special efforts for the plants and unique habitats in Southern Oregon!



THE PLANT PUZZLE

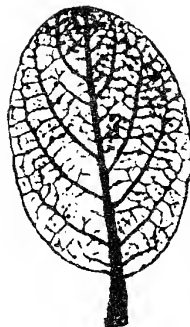
Sponsored by the Siskiyou Chapter

Do you recognize this plant? The first person to give the correct scientific name will win a prize. The illustrated leaf is from a native woody species.

Send your guess on a postcard to:
Peter Zika
4230 NW Clubhouse Pl. #1
Corvallis, OR 97330

No one submitted a correct identification last month, so the same plant is featured here.

1
cm



BITS AND PIECES

—NEWS AND INFORMATION FROM ALL OVER

ENDANGERED SPECIES ACT FUNDING REAUTHORIZATION

Every few years the Endangered Species Act (ESA) must have its funding authority renewed by Congress. This opens the door to amendments to the Act. In the past this has resulted in a net benefit for endangered wildlife and plants. This time around more than one attempt is being made to weaken the ESA.

Last summer a group of fourteen western Republican congressmen submitted HR 3092, nicknamed the "Human Protection Act", which would require "potential economic benefits under ESA outweigh potential economic costs". A group of anti-ESA lobbyists reportedly is preparing a comprehensive revamping of the Act to limit its power to protect endangered species.

On the other hand, Congressman Gerry Studds (D-MA), chair of the Fish and Wildlife Subcommittee, has introduced HR 4045, which embodies concerns of the environmental community. This would streamline the listing of species, improve critical habitat designation, strengthen enforcement of the act and insure adequate funding for conservation work.

The Nature Conservancy has stated its view that the "battle to halt destruction of habitat and consequent loss of species will be won or lost by the turn of the century". The upcoming tough fight over the ESA is a crucial part of this battle. You can help in this by writing your representative to support the Studds Endangered Species Act amendments (HR 4045) and oppose HR 3092 and other attempts to gut the ESA.

Remember that most politicians as well as governmental agencies do listen to public comments, and in fact agencies are often happy to get support in carrying out their legally mandated responsibilities. Only a small percent of citizens ever contact their representatives or agencies (guesses are 1-2%), so each voice heard really represents 50 to 100 who never speak up. It is possible to make a difference, as past efforts by environmentalists have demonstrated. A few more voices heard may help our vanishing species hold on into the next century and longer.

GREENSPACES: URBAN PARKS FOR THE FUTURE?

The Portland urban area's Metropolitan Service District's Greenspaces Master Plan is proposing a regional system of parks and other open spaces. This plan, in the Public Review Draft stage, is both ambitious and necessary. With developing inter-organizational cooperation, there is a real chance that the proposed goals can be carried out.

The idea of ensuring adequate parks for the urban area has been around for at least 100 years. Early Portland Parks planning efforts resulted in a few parks which at the time seemed quite distant from urban areas but which now are isolated islands in a sea of urban sprawl. Metro has mapped existing natural areas in the urbanized or urbanizing zone from Hagg Lake in the west to the Cascade foothills to the east, and from the Columbia to rural Oregon City and Wilsonville. Metro Greenspaces wants to "ensure that a green legacy is protected for ourselves and future generations." It is in the process of carrying out a "cooperative approach among many governmental and nongovernmental organizations to establish an inter-connected system of natural areas, open space, trails and greenways for wildlife and people" in Multnomah, Clackamas, Washington and Clark Counties.

The Greenspaces Master Plan includes specific tasks which need to be carried out over the coming years to achieve the goal of maintaining the quality of life and preserving the open space for which the region is famed. These "patches of natural area within the human dominated urban" area are also the last remnants of the native ecosystem of the area. Evaluation of the significance of these remnant areas is crucial to the future of the low-land plant and animal species which are more threatened by human impacts than mountain species, which at least aren't being paved over *en masse*. The initial draft plan will "incorporate native plants to the maximum extent practicable as the dominant landscape material on publically-owned, quasi-public, and tax-exempt lands".

Final approval of the plan is slated for July. For more information, contact: Metropolitan Greenspaces, 2000 SW 1st Ave., Portland OR 97201 (503)22-GREEN.

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GUIDELINES FOR CONTRIBUTORS

The NPSO *Bulletin* is published monthly as a service to NPSO members and the public. Contributions of all types are welcome.

DEADLINE: Copy is due with the editor by the 10th of each month. Submissions can be in any form. Author's name & affiliation are at the end of the article. Double space between paragraphs. For special materials (e.g., plant keys) choose an appropriate format, keeping in mind that readers may wish to carry your article pasted inside their favorite field guide. Formatting assistance is available from your editor. All *Bulletin* articles now go into the new NPSO database via computer. Camera-ready copy is not used, with rare exceptions.

Computer output: The editor prefers articles submitted on Macintosh or IBM disks, or via modem. Contact the editor for details.

Illustrations: Line drawings, prints, and high contrast B&W prints are useable. Some Macintosh graphics can be used also. Contact the editor about our current needs, or send them along with your article. **Credits:** If the item is not original, name and date the source. For original items, identify the author and indicate, for news items, if a by-line is desired. Indicate whether the item is to be used in its entirety or excerpted at the editor's discretion.

Scientific Names: Nomenclature should follow *Flora of the Pacific Northwest*, by Hitchcock et al., when appropriate. Use both scientific and common names if possible. *Italicize* genus and species, or underline.

Return of Originals: Submissions are not returned unless requested.

Membership in the Native Plant Society of Oregon is open to all.

Membership applications, renewals, and changes of address (include old address and zip code) should be sent to the Membership Chair.

NATIVE PLANT SOCIETY OF OREGON MEMBERSHIP FORM

Name _____

Chapter (if known) _____

Address _____

Is this a change of address?

If so, please write your *Old Address* here:

City _____ State _____ Zip+4 _____ - _____

Phone (Home) _____ (Work) _____

City _____ State _____ Zip _____

* **DUES** include monthly NPSO *Bulletin*. Full membership is for a calendar year, January through December. New memberships enrolled during September through December are charged a reduced "Quarter Membership" rate.

() New	() Renewal	() Quarter Membership (Sep.-Dec.)	\$3.00	() <i>Bulletin</i> Subscription only	\$12.00
() Student.....			\$ 8.00	() Sustaining.....	\$ 30.00
() Regular.....			12.00	() Patron.....	100.00
() Family Membership.....			18.00	() Life Member	500.00

* CONTRIBUTIONS:

Jean Davis Memorial Award Fund. \$ _____
 Leighton Ho Memorial Award Fund. \$ _____
 Rare and Endangered Plant Fund. \$ _____

* All contributions to the Native Plant Society of Oregon, a non-profit organization, are tax deductible. Please make checks for dues and contributions payable to NATIVE PLANT SOCIETY OF OREGON. Send completed form and full remittance to:

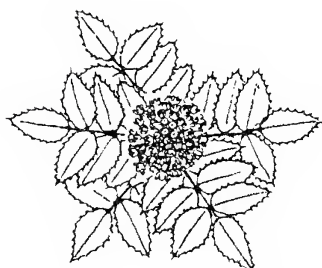
Jan Dobak, NPSO Membership Chair, 2584 NW Savier St., Portland OR 97210-2412.

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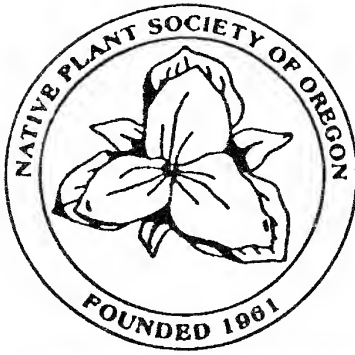
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*Send change of address notices
and membership requests to:*
Native Plant Society of Oregon
Jan Dobak, Membership Chair,
2584 NW Savier St.,
Portland, Oregon 97210-2412

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Bulletin of the
**NATIVE PLANT SOCIETY
OF OREGON**

Dedicated to the enjoyment, conservation, and study
of Oregon's native vegetation

VOLUME 25 NUMBER 7

JULY 1992

ISSN 0884-599

Native Plant Society of Oregon PO Box 902, Eugene OR 97402

Membership inquiries: Jan Dobak, Membership, 2584 NW Savier St., Portland OR 97210-2412

For more society information, see the inside back cover.

IMPORTANT NOTE TO FIELD TRIP PARTICIPANTS:

Field trips take place rain or shine, so proper dress and footwear are essential. Trips may be strenuous and/or hazardous. Please contact the trip leader for information about difficulty, mileage, and terrain. Participation is at your own risk. Bring water and lunch. All NPSO activities are open to the public at no charge (other than carpool mileage), and friends, newcomers and visitors are always welcome.

Notice to field trip chairs and leaders: The Forest Service and other Federal agencies have set policies limiting group size in wilderness areas to 12. The reason for this is to limit the human impact on these fragile areas. Each group using wilderness must be no larger than 12.

CHAPTER NEWS

Blue Mountain

11 July, Sat.

FIELD TRIP to Indian Rock above Olive Lake in Grant County, elevation 8000 ft. The leader of this trip will be Harry Vincett. Note!: This trip leaves BMCC greenhouse at 7am.

Corvallis

Contact Duncan Thomas (752-6529) for more information.

Emerald

18 July, Sat.

FIELD TRIP: Evelyn Everett will lead a trip to view high elevation wildflowers at Bristow Prairie and Bradley Lake, along the Calapooya Divide, in the Rigdon Ranger District of the Willamette National Forest. These are both Forest Service Special Interest Areas. Bring lunch, drink and hiking shoes. For more information call Evelyn (345-1746).

High Desert

11 July, Sat.

FIELD TRIP: Rare plants on the Big Summit District. The rare Peck's mariposa lily and other plants of interest will be featured on this trip to the Big Summit area. Forest Service Botanist Richard Helliwell (447-9645 days) will lead us. This trip will not leave from Bend. Meet at 9:30am at the Ochoco Ranger Station, 25 miles east of Prineville.

18 July, Sat.

FIELD TRIP: Forest Health and Sustainable Forest Management. Areas of the conifer forests of central and eastern Oregon have been called "ecosystems in collapse". We will see conditions that have led to this problem and understand the natural forces at work. Entomologist Andy Eglitis and Plant pathologist Helen Maffei from the Deschutes National Forest will accompany us. Depart from Juniper Park parking lot near the tennis courts at 7th and NE Franklin Ave. in Bend at 8:30am sharp. Trip leader: Stu Garrett (389-6981 eves).

25 July, Sat. **FIELD TRIP:** This trip to Echo Basin / Cone Mountain will feature the 7-ft. diameter Alaska cedars of Echo Basin. The area is near Tombstone Prairie, just west of Santiam Pass. Easy to moderate hiking. Leader is Mary Vogel (385-8633).

15 Aug., Sat. **FIELD TRIP:** Broken Top Volcano in the Three Sisters Wilderness. Our annual hike to view the spectacular display of alpine wildflowers and glacial geology of Broken Top is an NPSO favorite. This is a five-mile roundtrip, moderate to strenuous hike with a 1,500 ft. elevation gain. We'll do mostly off-trail hiking. The number of hikers per group is restricted by USFS wilderness area regulations. **Preregistration is required!** Leader is Stu Garrett (389-6981, eves.)

Mid-Columbia

1 July, Wed. **MEETING.** 7:30pm at the Mosier School. Lisa Lantz from the OSU Botany Department, will report on her research grant partially funded by the Mid-Columbia Chapter. The focus species is *Amsinckia carinata*, the Malheur Valley fiddleneck, which is endemic to the distinctive talus outcrops around Harper. It is listed as a threatened species by Oregon and is a candidate for federal listing as well.

5 Aug., Wed. **MEETING.** 7:30pm at the Mosier School. Debbie Champigny, Interpretive Specialist with the Zigzag Ranger District of Mt. Hood National Forest, will present the newly created slide program, "Celebrating Wildflowers", which has been showing at Timberline Lodge.

North Coast

11 July, Sat. **FIELD TRIP:** Hike on Mt. Hebo. Meet at 9am, PUD parking lot, 1115 Pacific, or 9:45am at Hebo Ranger Station. Bring lunch. Call Jim Winslow (842-2246) for details.

28 July, Tues. **MEETING.** 7pm at the Carl Rawe Meeting Room, Tillamook PUD, 1115 Pacific, Tillamook. Program to be announced.

Portland

14 July, Tues. **MEETING.** 7pm at First United Methodist Church, 1838 SW Jefferson St., Portland. George Lewis will present a slide program on the "Wonders and Beauties of Oregon Wildflowers"—an overview of Oregon's beautiful plants, including one seldom seen.

For information on Portland Chapter field trips, contact George Lewis (760-2316).

Siskiyou

18 July, Sat. **FIELD TRIP:** Dutchman's peak. Richard Brock will lead a field trip exploring the diverse flowers of the Dutchman's Peak region in the Applegate. Easy hiking. Leave from Ashland BiMart at 8:30am, or Medford K-Mart at 9:00am, or Applegate Ranger Station at 9:15am. For information call Richard Brock 482-4111).

25 July, Sat. **FIELD TRIP:** Eight Dollar Mountain and *Darlingtonia* bogs. Anita Seda, botanist for the Galice and Illinois Ranger Districts, USFS, will lead a tour of the proposed T.J. Howell Botanical Drive. We will have an opportunity to give suggestions on stops and interpretive areas on this proposed self-guided tour of wet and dry serpentine areas. Leave from Ashland BiMart at 8am, Medford Food-for-Less at 8:30am, or Selma Market at 9:30am. For information call Anita Seda (592-2166) or Ginny Post (779-4102).

South Coast

For information on the pending formation of this chapter, contact Bruce Rittenhouse (888-9328).

Umpqua Valley

For information, call Ted Schattenkerk (679-6953).

Willamette Valley

1 July, Wed.

FIELD TRIP: A midweek trip to see Mountain Laurel and other wildflowers at Crown Lake, near Fire camp Lakes off the South Fork of the Breitenbush. Contact leaders George and Harriet Schoppert for details. (859-2613).

12 July, Sun.

FIELD TRIP: Larry Scofield (Salem District BLM Botanist) will lead us on a trip to Niagara Falls in the Coast Range. This is about an hours drive over good gravel roads. Hike one mile to the falls with resting benches along the trail. Leave from Dallas Safeway parking lot at 9am. Call Larry Scofield (Falls City, 787-3833) or Kathy P. Connelly (327-1212) for further details.

20 July, Mon.

MEETING / FIELD TRIP: We will tour the Willamette University Botanical Garden looking for late bloomers and plants in seed. This garden contains a variety of native plant habitats. Meet at 7pm in front of the Sparks Center on the Willamette University Campus. This is near the entrance to the university just off Mission Street (near 12th St.) Contact Kathy Connelly for more info (327-1212).

William Cusick

11 & 12 July, Sat. & Sun.

CAMP OUT AND WORK PARTY. All are welcome to a work party and barbecue at The Nature Conservancy's Middle Fork Preserve near John Day, Oregon. For information, call Berta Youtie (962-3903).

12 July, Sun.

FIELD TRIP: Paula Brooks will lead a walk on Mount Howard to view alpine flowers. Meet at the gondola near Wallowa Lake State Park at 10am. For more information call Paula (523-6391). There is a \$10 fee for the gondola.

22 Aug., Sun.

FIELD TRIP: Bob Ottersberg will lead a trip to see how plant communities are related to soil types of the Wallowa Mountains. Leave from the Richland Post Office at 8am. Call Bob (742-6200) for more information.

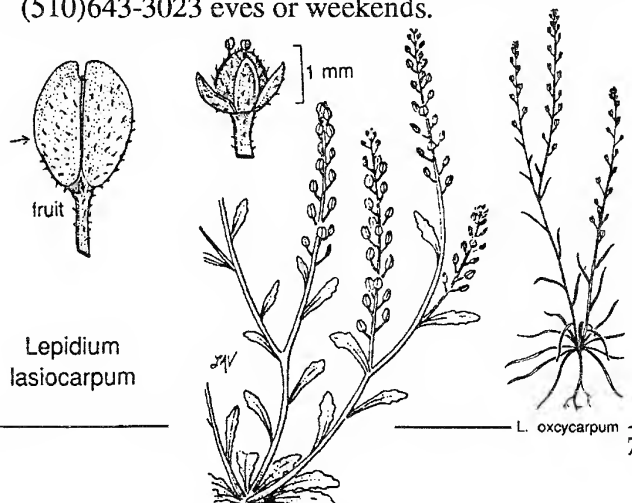
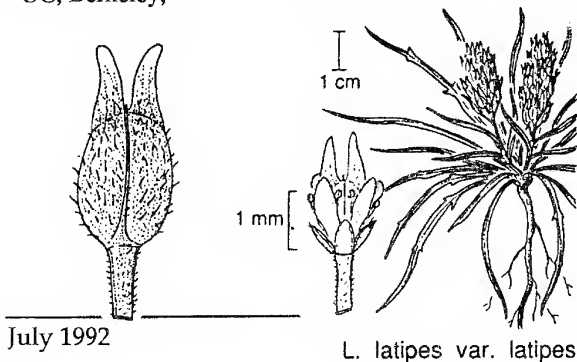
NATURAL SCIENCE ILLUSTRATION: PLANTS IN PEN & INK OR WATERCOLOR

This year's Natural Science Illustration course at Malheur Field Station will focus on rendering plants in both ink and watercolor. The course will be a marathon of artwork in Oregon's High Desert, designed to accommodate the needs of both the beginning illustrator and the more seasoned artist. In the field we will work on basic drawing skills—how to render organisms with both aesthetics and accuracy. In the classroom, we will work with both living and preserved specimens, and will discover how to best interpret and portray different kinds of plants by becoming familiar with a variety of important botanical references. Illustration topics will include basic From The Jepson Manual: Higher Plants of California Reprinted with permission from the Jepson Manual Project, UC, Berkeley,

drawing skills, use of media, publication opportunities, creating the illustration resume and portfolio, and making a business of botanical illustration.

The instructor is Linda Ann Vorobik, who holds a BA and a Ph.D in biology and has instructed numerous college level courses in biology. She has been illustrating for 15 years and has appeared in numerous scientific books and journals. She is Principal Illustrator for the Jepson and University Herbaria at UC, Berkeley, and is providing illustrations for The Jepson Manual: Higher Plants of California, and A Flora of Santa Cruz Island.

For more information, write Dr. Linda Ann Vorobik, Jepson Herbarium, UC, 6701 San Pablo Ave., Oakland CA 94608, or call (510)643-7008 days or (510)643-3023 eves or weekends.



Arthur Cronquist—1919-1992

A giant among western botanists has left us—in body, but not in spirit, for he leaves us a rich legacy of his many contributions to systematic botany. Indeed, a giant both in physical stature and in botanical achievements, Art Cronquist was a remarkable scientist. We in the west know him best for his prodigious output of major work on the Floras of the Pacific Northwest and of the Intermountain West. Though these were (and are) team efforts, the Cronquist 'signature' is clearly fixed in these regional floras. Just think of our own PNW flora in its original five volume version. Art was way ahead of his collaborators, C. Leo Hitchcock and Marion Ownbey, having finished the Sunflower Family well before the other authors had done their homework. So, Volume Five, *Compositae*, was the first to appear. And then the concepts for the assigning names to the plants, set out in that first volume, are vintage Cronquist. All serious plantwatchers should reread the introduction to volume 5. The ideas for what constitutes a species, a subspecies and variety were clearly set forth in that essay. Not all botanists would agree with these concepts, but that was often the case with Cronquistian utterances. He was an independent thinker, and usually right, to my mind.

The team effort with Hitchcock, Ownbey, and Thompson to produce the five volume Vascular Plants of the Pacific Northwest began in the 1950s, when Cronquist was still at Pullman. One has to say that Hitchcock was the key member of the team—the coordinator, arbiter, and compiler of the volumes, but Art was the innovator and prodigious producer of manuscript. I remember "Hitchy" being astounded at the speed with which Art turned out the treatment of *Carex*, the vast and difficult genus of sedges. And Art's superb handling of the more than 50 species of *Penstemon* was another major, rapidfire output.

I was on the phone with Art only days ago in early March. I had caught him in the midst of yet another major contribution, his part of the Intermountain Flora. Art said he was putting on the finishing touches on the...you guessed it...the *Compositae* for that vast floral region between the Rockies and the Sierra Nevada. He was overseeing the artist doing the illustrations of sunflowers of the sagebrush country.

Cronquist's mark in botany goes beyond regional floras. Always mining the rich veins of taxonomy and systematics, Art ranged into areas of evolution, phylogeny, concepts of what constitutes a species, and critical evaluation of the latest fads in science. Art was skeptical of the utility of the biological definition of the species. He knew that the reproductive test of a species—fertility within and sterility between species—was hard to apply in plants. So in 1978, he devised a definition that encompassed the real world of the practicing taxonomist. Here is the definition—elegantly simple and practical: "Species are the smallest groups that are consistently and persistently distinct and distinguishable by ordinary means" (Cronquist, A. 1979, "Once Again, What is a Species", in *Biosystematics in Agriculture*).

Beyond his continual involvement in regional floras, Art leaves us with many original papers in systematics and three major books: An Integrated System of Classification of Flowering Plants, Columbia University Press (meticulous descriptions of the world's flowering plant families); The Evolution and Classification of Flowering Plants, New York Botanical Garden; and, with H. Gleason, Natural Geography of Plants (a gem of a book on plant distribution and biogeography).

Some tidbits from the Cronquist curriculum vitae are in order. He was born in San Jose on Mar. 19, 1919. He earned his bachelor's and master's degrees at Utah State, where he surely came under the influence of Bassett Maguire. He took his doctorate at the University of Minnesota. From 1948 to 1951, Art was a colleague of Marion Ownbey at Pullman. He then moved on to the New York Botanical Garden, where he remained for the rest of his productive life. His last moments on Mar. 22, 1992 were spent doing what he did most expertly and serendipitously: gleaning botanical information from dried specimens at the herbarium of Brigham Young University at Provo.

So the next time you use the five volume work or the one volume Flora of the PNW, pay momentary respect to one of the men behind those outstanding products—Dr. Arthur Cronquist, an outstanding scientist.

--A. R. Kruckeberg, *Douglasia*,
Vol. xvi, #2, Spring 1992

1992 CHALLENGE COST SHARE PROJECTS

This year the Eugene District Bureau of Land Management (BLM) will implement three Cost Share projects with the Oregon Department of Agriculture's (ODA) Conservation Biology Program. The species of interest are *Lomatium bradshawii* (Federal Endangered List), *Montia howellii* (Federal Candidate List) and *Cimicifuga elata* (BLM Sensitive List).

Lomatium bradshawii is a rare perennial plant species endemic to remnant Willamette Valley wet prairies.

The 1992 Cost Share program between BLM and ODA will consist of:

- 1) A throughout pollination and breeding system study covering what insects pollinate *Lomatium*—is the species a generalist, or does it require specific insect visitors? Does it ever self-pollinate?
- 2) Because most if not all sites for this species occur next to private agricultural areas, evaluate the potential impacts of pesticide applications on pollinators.
- 3) Establish a monitoring plan that will provide information on population trends based on current transition matrix models.
- 4) Determine the frequency and effect of a pathogenic fungus that has been identified on this species.

Montia howellii is an annual herb species historically found from British Columbia to California. Its habitat is thought to be limited to seasonally wet lowland areas.

The 1992 program between BLM and ODA for *Montia howellii* includes resampling disturbance ecology plots which were established in 1991. Because it is hypothesized that this species may rely on periodic disturbance for seedling establishment, a study was initiated in 1991 to determine the effectiveness of varying degrees of soil disturbance in encouraging seedlings.

Cimicifuga elata is a perennial plant species found from British Columbia to Oregon.

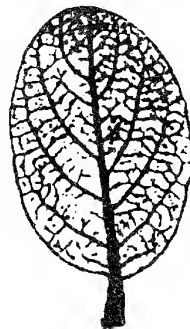
Cimicifuga is a forest species and on the Eugene District has been found in several old growth stands.

The 1992 Cost Share program for *Cimicifuga elata* will be an interagency effort with other BLM Districts, several US Forest Service Districts as well as ODA. The objectives of this project are:

- 1) Determine the current condition of populations on federal land in Oregon.
- 2) Determine the plant association at known sites and analyze various other physical site attributes.
- 3) Establish a monitoring program at selected sites to determine the effects of various management activities on population and to determine long term changes in other sites not impacted by timber management activities.

—Nancy Wogan
Eugene District BLM

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cm



THE PLANT PUZZLE

Sponsored by the Siskiyou Chapter

Do you recognize this plant? The first person to give the correct scientific name will win a prize. The illustrated leaf is from a native woody species.

Send your guess on a postcard to:
Peter Zika
4230 NW Clubhouse Pl. #1
Corvallis, OR 97330

No one submitted a correct identification last month, so the same plant is featured here.

BITS AND PIECES

---NEWS AND INFORMATION FROM ALL OVER

ENDANGERED, THREATENED, AND SENSITIVE PLANTS OF NEVADA RECEIVES UPDATE

This updated 48-page booklet lists the most imperiled plants of the State of Nevada. It is the result of the cooperative efforts of the Northern Nevada Native Plant Society, Nevada Natural Heritage Program, Nevada State Museum, Bureau of Land Management, US Fish & Wildlife Service, US Forest Service, and The Nature Conservancy.

Included are common and scientific names, synonymy, NNNPS status and recommendations for future federal status, current federal and state status, the Heritage Program's rankings, and known county and state distribution. The booklet is intended not just to inform about rare plants but to encourage wiser land use decisions in respect to native plants. It should be useful in underbotanized Southeastern Oregon.

Free copies are available from the Nevada State Office of the BLM (850 Harvard Way, Reno NV 89502 {702}785-6386), the booklets publisher.

1992 PLANT CONSERVATION DIRECTORY

This is a comprehensive listing of more than 500 professionals and organizations involved with the conservation of American native plants, and also includes a summary of state conservation laws. It also has a listing by state of rare and endangered plants.

The listings include the Center for Plant Conservation contacts in each state; federal and state resource-level contacts; contacts in state Heritage Programs, Native Plant Societies, and other national private groups working on plant conservation.

The Resource Book can be ordered for \$15 by sending your name, organization's name, address and phone number to the Center for Plant Conservation, Missouri Botanical Garden, PO Box 299, St. Louis, Missouri 63166. Also indicate if you would like more information about the CPC.

1992 FIRE SEASON STARTS UP SIX WEEKS EARLY

I think everyone is aware of the extreme potential for wildfires in this year of continuing drought. The start of fire season was declared six years early, and fire crews started work by mid-May. The first residences were destroyed in June. Firefighters are all holding their breath.

East of the Cascades the drought has dragged on for six to nine years, depending on the location. Moisture conditions were already very low in many areas in May. Governmental agencies are striving to cooperate on fire fighting this year even more than usual. Expect extensive forest and rangeland closures throughout Oregon later this summer and perhaps into fall.

How dry is it? Here are the statistics on what the stream levels are as a percent of average:

Central and Southern Eastern Oregon:	6 to 59%
Rogue / Umpqua Basins:	32 to 70%
Wallowa Mountains:	63 to 72%
Willamette Valley:	70 to 79%

Fire danger is only one of a number of problems presented by the dry conditions. The low stream-flows levels are threatening our fish populations, some of which were already severely damaged by logging, grazing, past fires and road building. Forage plants are drying up early, and in the dryer parts of the state over half of both natural and man-made water sources are completely dried up, and those remaining contain less than one third of their normal capacity. This is a profound problem both for wildlife and the cattle industry. In the BLM's Lakeview District, for example, only 40 to 50% of the usual cattle turnout is likely to be allowed this year.

It has been discovered that not all fire is bad. In fact, part of the danger from fire this year is due to past fire suppression. Under natural conditions high levels of downed wood in the forest would have burned before reaching its current high level, and less brush and small trees would be present. Fewer fires would exist to have been damaged by insects. Current conditions may lead to larger and more intense burns than often occurred naturally.

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GUIDELINES FOR CONTRIBUTORS

The NPSO *Bulletin* is published monthly as a service to NPSO members and the public. Contributions of all types are welcome.

DEADLINE: Copy is due with the editor by the 10th of each month. Submissions can be in any form. Author's name & affiliation are at the end of the article. Double space between paragraphs. For special materials (e.g., plant keys) choose an appropriate format, keeping in mind that readers may wish to carry your article pasted inside their favorite field guide. Formatting assistance is available from your editor. All *Bulletin* articles now go into the new NPSO database via computer. Camera-ready copy is not used, with rare exceptions.

Computer output: The editor prefers articles submitted on Macintosh or IBM disks, or via modem. Contact the editor for details.

Illustrations: Line drawings, prints, and high contrast B&W prints are useable. Some Macintosh graphics can be used also. Contact the editor about our current needs, or send them along with your article.

Credits: If the item is not original, name and date the source. For original items, identify the author and indicate, for news items, if a by-line is desired. Indicate whether the item is to be used in its entirety or excerpted at the editor's discretion.

Scientific Names: Nomenclature should follow *Flora of the Pacific Northwest*, by Hitchcock et al., when appropriate. Use both scientific and common names if possible. *Italicize* genus and species, or underline.

Return of Originals: Submissions are not returned unless requested.

Membership in the Native Plant Society of Oregon is open to all.

Membership applications, renewals, and changes of address (include old address and zip code) should be sent to the Membership Chair.

NATIVE PLANT SOCIETY OF OREGON MEMBERSHIP FORM

Name _____

Chapter (if known) _____

Address _____

Is this a change of address?

If so, please write your *Old Address* here:

City _____ State _____ Zip+4 _____ - _____

Phone (Home) _____ (Work) _____

City _____ State _____ Zip _____

* **DUES** include monthly NPSO *Bulletin*. Full membership is for a calendar year, January through December. New memberships enrolled during September through December are charged a reduced "Quarter Membership" rate.

() New	() Renewal	() Quarter Membership (Sep.-Dec.) \$3.00	() <i>Bulletin</i> Subscription only \$12.00
() Student.....		\$ 8.00	() Sustaining..... \$ 30.00
() Regular.....		12.00	() Patron..... 100.00
() Family Membership.....		18.00	() Life Member 500.00

* CONTRIBUTIONS:

Leighton Ho Memorial Award Fund..... \$ _____
 Rare and Endangered Plant Fund..... \$ _____

* All contributions to the Native Plant Society of Oregon, a non-profit organization, are tax deductible. Please make checks for dues and contributions payable to NATIVE PLANT SOCIETY OF OREGON. Send completed form and full remittance to:

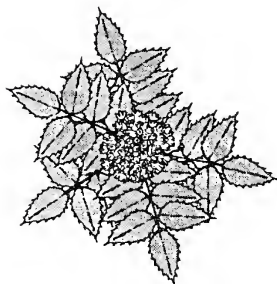
Jan Dobak, NPSO Membership Chair, 2584 NW Savier St., Portland OR 97210-2412.

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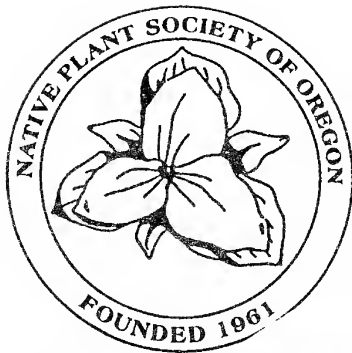
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Send change of address notices
and membership requests to:
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Jan Dobak, Membership Chair,
2584 NW Savier St.,
Portland, Oregon 97210-2412

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of Oregon's native vegetation

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Membership inquiries: Jan Dobak, Membership, 2584 NW Savier St., Portland OR 97210-2412

For more society information, see the inside back cover.

IMPORTANT NOTE TO FIELD TRIP PARTICIPANTS:

Field trips take place rain or shine, so proper dress and footwear are essential. Trips may be strenuous and/or hazardous. Please contact the trip leader for information about difficulty, mileage, and terrain. Participation is at your own risk. Bring water and lunch. All NPSO activities are open to the public at no charge (other than carpool mileage), and friends, newcomers and visitors are always welcome.

Notice to field trip chairs and leaders: The Forest Service and other Federal agencies have set policies limiting group size in wilderness areas to 12. The reason for this is to limit the human impact on these fragile areas. Each group using wilderness must be no larger than 12.

CHAPTER NEWS

Blue Mountain

* * * * *

For information call Jerry Baker (566-2244).

Corvallis

6 Aug., Thurs.

MEETING. 7:30 pm at Corl House. Conservation Committee meeting. Anyone interested in conservation issues of the region is welcome to attend.

8 Aug., Sat

FIELD TRIP. Canoe to a coastal pond in Lane County with Peter Zika to look for aquatics. Leave 8:30 am from the parking lot of the Monroe Street Beanery. Bring handlens, lunch and arrange for a canoe.

Emerald

* * * * *

For information call Bruce Newhouse (343-2364).

High Desert

15 Aug., Sat.

FIELD TRIP: Broken Top Volcano in the Three Sisters Wilderness. Our annual hike to view the spectacular display of alpine wildflowers and glacial geology of Broken Top is an NPSO favorite. This is a five-mile roundtrip, moderate to strenuous hike with a 1,500 ft. elevation gain. We'll do mostly off-trail hiking. The number of hikers per group is restricted by USFS wilderness area regulations. **Preregistration is required!** Leader is Stu Garrett (389-6981, eves.)

Mid-Columbia

5 Aug., Wed.

MEETING. 7:30pm at the Mosier School. Debbie Champigny, Interpretive Specialist with the Zigzag Ranger District of Mt. Hood National Forest, will present the newly created slide program, "Celebrating Wildflowers", which has been showing at Timberline Lodge.

2 Sept., Wed.

MEETING. 7:30pm at the Mosier School. A presentation on the "Ethics and Issues of Reintroducing Rare Plants" by Tom Kaye of the Corvallis NPSO Chapter.

North Coast

15 Aug., Sat.

FIELD TRIP: A picnic will be held at 11am at Mignon Johanson's, 4590 Bay Ocean Rd., Cape Meares. Bring a dessert, salad or hot dish and table service. The field trip will be on Bayocean spit following the potluck.

There will not be a **MEETING** in August.

Portland

MEETING. There is no Portland Chapter meeting in August.

For information on Portland Chapter field trips, contact George Lewis (760-2316).

Siskiyou

8 Aug., Sat.

FIELD TRIP: Hershberger Peak. Carol Harmount, Botanist for the PROspect Ranger District, will lead a trip to the Hershberger Lookout at 6200 ft. elevation on the Rogue-Umpqua divide. For a moderate to strenuous hike, you can hike to the top from Horse Camp, or drive to the top for a less strenuous outing. Leave from the Food-For-Less lot in Medford at 9am, or the Prospect Ranger Station at 10am. For information call Ginny Post (779-4102).

29 Aug., Sat.

FIELD TRIP: Frog Pond-Cameron Meadows/ Barbara Mumblo, Botanist for the Applegate Ranger District, will lead a strenuous hike. Frog Pond is in a lovely meadow at the base of Mt. Emily with great views of Red Buttes. Leave from Medford K-Mart at 8am, or Applegate Star Ranger Station at 8:45am. For information call Barbara Mumblo (899-1812).

South Coast

For information on the pending formation of this chapter, contact Bruce Rittenhouse (888-9328).

Umpqua Valley

8 Aug., Sat.

FIELD TRIP: A loop trip up Jackson Creek off of the South Umpqua River, including Bald Ridge, Tucker Gap, Huckleberry Lake, Huckleberry Gap, and the trailhead for Donigan Prairie to see *Spirea*, globe mallow, (*Illiamna latibracteat*), Umpqua swertia (*Frasera umpquaensis*), and oak fern (*Gymnocarpium dryopteris*). Leave at 7:45am from the BLM parking lot, 777 Garden Valley Rd. For information, call Mildred Thiele (672-5397).

13 Aug., Thurs.

MEETING: 7pm in Room 311 of the Douglas County Courthouse.

Willamette Valley

16 Aug., Sun.

FIELD TRIP: Mt. Hood flowers on the Timberline Trail from Timberline Lodge to Zigzag Canyon and return. Fairly strenuous hike, but worth it! Contact leader Jim Versteeg (H-363-7397; W-326-3758 Portland) for details.

17 Aug., Mon.

MEETING / FIELD TRIP: We Plan to take a stroll around part of Minto Island. We are sure to see some common weedy species in bloom as well as viewing native plant foliage and fruits. We will also discuss the future fate of Minto Island. Meet at 7pm at the third (and farthest) parking lot down Minto Island Road, near the covered picnic area. Contact Kathy Connelly for more info (327-1212).

12 Sept., Sat.

FIELD TRIP: Breitenbush Lake—in the Cascades east of Detroit Lake. Beautiful area for fall colors. Leave from Dallas Safeway parking lot at 9am. Call Leader Wilbur Bluhm (393-2934) for details.

William Cusick

1 Aug., Sat.

FIELD TRIP: Bob Ottersberg will lead a trip to see how plant communities are related to soil types of the Wallowa Mountains. Leave from the Richland Post Office at 8am. Call Bob (742-6200) for info.

MAJOR REVISIONS TO 1872 MINING LAW MAY BE ON THEIR WAY

On June 24th, the House Interior Committee passed a strong comprehensive reform bill that may lead to revamping of the outdated and environmentally damaging Mining Law of 1872. A flood of letters, calls and faxes to Committee members from pro-reform citizens is credited with helping win this crucial vote. This is the first time in the 120 year history of this law that the House Interior Committee voted to reform this hoary giveaway to special interests.

Mining interests and their elected supporters tried to block any action. Anti-reformers included a group appropriately calling themselves "People for the Worst!" (a self-inflicted satire on "People for the West!", a pro-environment group) tried to drown out citizen input by tying up phone and fax lines, and went to the extreme of picketing Committee Chair George Miller's home office. Anti-reform tactics were based on preventing a vote, and once this failed they had no substitute bill or alternative language available.

The final vote to pass reform bill HR 918, "The Mineral Exploration and Development Act" favored the bill 26 to 19. Votes on four separate issues and maneuvers were taken in the process; Peter DeFazio (D-OR) took the environmentalist position each time, while Robert F. Smith (R-OR) each time voted against reform of the old law. The voting was mostly on party lines, with all Republicans voting each time to prevent reform. Most of the heavy lobbying was of Democratic swing votes.

The vote sent the bill to the full House for consideration. Because a few provisions in the Interior Committee-approved Act referred to the USFS, the bill was referred to the Agriculture Committee, where a vote is likely in September if delays by anti-reform forces do not hamstring the process. It is important to success of the mining law reform movement to write both DeFazio urging continued support of reform, and to Smith urging him to support ending the current antiquated system allowing both degradation of the environment by mining and the failure of the US Government and taxpayersto benefit from the mineral wealth in the lands it holds. Their numbers, and those of some other elected representatives, are given on page 85.

High points of the proposed reforms include:

- 1) an end to giving land away by patenting, where land with valuable minerals could be taken off the government's hands for \$2.50 to \$5.00 per acre;
- 2) a mineral royalty of 8% (a amendment for this was originally submitted by Oregon's DeFazio), the first ever requirement of real payment for removal of minerals from Federal land;
- 3) tight reclamation requirements and establishment of a reclamation fund using half of the royalties, combined with actual enforcement provisions, including enabling regulators to turn down mining proposals. These proposals would be the first ever reclamation requirements at the Federal level.

The Senate Energy Committee, which has jurisdiction over mining, was inspired by this to schedule debate on reform starting July 1st. As of this writing, the only known reform bill is S. 433, which was offered by Dale Bumpers (D-AR) in a weakened version in hopes of attracting more support. This ploy has failed, however, and no action is likely in the Senate before the next session.

If something like S. 918 makes it through both House and Senate and past the president, it would go a long ways towards cleaning up the mining industry, including open pit mining and cyanide heap leach mining.

So it looks like 1993 may be the crucial year for mining reform legislation. Meanwhile, input is still needed from citizens to Congress as noted above. Continued support of mining reform by the public now will translate into better chances for a strong law to finally be adopted.

It is heartening to see some of our (exclusively Democratic) Congressmen take a solid stand in supporting improvement of the laws governing mining. Requiring reclamation to help in repairing the inevitable ecologic disruptions of mining operations will go a long ways towards having mining operations pay for their own costs. The light 8% royalty combined with ending the patenting giveaway will in effect take mining off the welfare roles, and allow the US Government to profit slightly from mining of minerals it now owns. Giving the regulators the ability to enforce the rules is only common sense.

—Bryan D. Boyce

VERONICA BECCABUNGA – A LINGUISTIC HISTORY

If you have gone flower searching in late summer or early fall, you may remember seeing a tiny blue flower growing near water. In Alton Baker Park in Eugene, it blooms beside a duck pond, where Dr. David Wagner likes to point it out to people on his wildflower walks. *Veronica americana* is found in wet places, usually at low elevation, all the way across North America. The plant is a low-growing perennial with opposite, oval leaves on short petioles; it bears its racemes of flowers in the leaf axils. Each flower has three wide petals above, one narrow petal below, and two stamens—the typical “speedwell” shape.

This particular speedwell happens to be so closely related to one European species that it may soon be reclassified as *Veronica beccabunga* spp. *americana*. This brings up a question: What did Linnaeus mean when he used that odd word “beccabunga”? Was it a joke? Was it the name of some obscure eighteenth century botanist?

The answer turns out to be simple, if one can find the right dictionaries. I started out searching the Italian encyclopedias in the University of Oregon library. They list the word as the common name of two streamside plants, *Veronica beccabunga* and *V. anagallis*. One book traces the name to a Middle High German word, “bekebunge”.

Unfortunately, the only Middle High German dictionary available contained no such word, but of course Middle High German was spoken from AD 1050 to 1500, which gives room for change.

So OK, back to the Italian, using multi-volume dictionaries this time. One source refers the word to Low German, a modern dialect; each authority says “bunge” comes from a Middle High German word meaning ‘tuber’. Both dictionaries describe the two veronicas as streamside or swampland plants with hollow tuberous roots. Both also refer to the modern German “Bachbunge”.

Unfortunately that word does not appear in newer German dictionaries. So, back to the nineteenth century. The Middle High German dictionary defines “Bach-bunge” as “berula”, a word no one else seems to have heard of. According to the brothers Grimm, “bunge” means drum, and is related to “bängen” and “bingelin” (or as we say in English, bing, bang, bong).

A couple of German / English dictionaries make things clearer. “Bach” means a little brook and a dozen words begin that syllable, notably “bachbunge”, which means the brooklime, and “bachansel”, which turns out to be the water ouzel.

Apparently the name spread from Germany, becoming “beccabunga” in Italy, “becabunga” in Spain, and “baechabanga” in Sweden. So now one can guess why Linnaeus picked the Italian form of the name: it sounded like the word he grew up with, but looked more like Latin. And, if we like, we can visualize the little brooks edged with blue-flowered, hollow-rooted plants, and possibly, water ouzels dipping among them.

—Robin Lodewick
Emerald Chapter

A BOTANICAL WORD PUZZLE

Hidden in this matrix of letters are the scientific names of 43 genera of trees, shrubs, and vines of Oregon. Names may run horizontally, vertically, or diagonally and may be spelled backwards or forwards. Some letters are shared among two or more names. *Sorbus* has been outlined to give you an idea of what to look for. An alphabetical list of the genera follows: *Abies, Acer, Alnus, Arbutus, Berberis, Betula, Celtis, Cornus, Cytisus, Ephedra, Ilex, Larix, Ledum, Lilium, Lupinus, Malus, Marah, Myrica, Oemleria, Paxistima, Phlox, Picea, Pinus, Populus, Prunus, Pseudotsuga, Purshia, Pyrus, Quercus, Rhamnus, Rhus, Ribes, Rosa, Rubus, Salix, Sambucus, Sequoia, Smilax, Sorbus, Thuja, Tsuga, Ulex, Vitis*. When you have circled all the names in the above list, enough letters will be left over to spell the name of a shrub you would probably like to club me with for inventing this devilish puzzle. Don't give up too soon. The solution will be published next month. By the way, excuse the inclusion of *Lilium*, not a tree or shrub but a name that happened to fit perfectly in one place in the matrix. Rate your results by the following scorecard:

40-43 Genius Level

36-39 Very Sharp

32-35 No Slouch

28-31 Passable

27 or below: I said the puzzle was devilish!

—Ken Chambers, Corvallis Chapter

THE PLANT PUZZLE

Sponsored by the Siskiyou Chapter

Give the scientific names of three woody species growing wild in Oregon, Maine and Tennessee. Each plant must grow wild in all three states, and each plant must be from a different plant family.

The first person to solve the puzzle will win a prize.

Send your guess on a postcard to:

Peter Zika
4230 NW Clubhouse Pl. #1
Corvallis, OR 97330

Bruce Newhouse of Eugene solved the last puzzle: rock willow, *Salix vestita*.

S O R H U S U L U P O P
I S X A P U M A R A H S
T U A I U N U R E C A E
L N L O R I I I P I M U
E U I U S P L X R R A D
C R M Q H U I E L Y L O
O P S E I L L L S M U T
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B E E G U T S S I I U O
R H C S U T Y R N L M R
E P I A X S U C R E U Q
B E P A M I T S I X A P

CONTACTING YOUR PUBLIC OFFICIALS

Wishing to make your views known to your elected representatives in Congress?

Write to Representatives at:

The Honorable Les Aucoin
2159 Rayburn Building
Washington DC 20515
Environmental Staff: Mark Gaede

The Honorable Bob Smith
118 Cannon Building
Washington DC 20515
Environmental Staff: Pete Thompson & Roger Taylor

The Honorable Ron Wyden
2452 Rayburn Building
Washington DC 20515
Environmental Staff: Peter Ravella

The Honorable Peter DeFazio
1729 Longworth Building
Washington DC 20515
Environmental Staff: Jeff Stier

The Honorable Mike Kokpetski
2159 Rayburn Building
Washington DC 20515
Environmental Staff: Alexandra Buell

Write to Senators at:

The Honorable Mark Hatfield
711 Hart Building
Washington DC 20510

The Honorable Bob Packwood
259 Russell Building
Washington DC 20510

WRITE WITH FEELING AND FACT!

The most effective letter is knowledgeable but written with obvious personal conviction. Letters following any obvious format that is repeated by many writers carry less impact with the staff which reads them. Concrete information is important, but so is intensity of feeling. Incorporate both if possible.

BITS AND PIECES

---NEWS AND INFORMATION FROM ALL OVER

NATURE OF OREGON INFORMATION CENTER

This innovative information center is intended to provide information to all kinds of users of Oregon's outdoors. Only recently opened, The Nature of Oregon Information Center carries thousands of maps, brochures and publications for those who want to hike, tour, camp, fish, pan for gold or find out more about the state. Also included is the Forest Services' Trail Information System (TRIS), a computerized listing of hiking trail information, and aerial photos and satellite images of much of the state. All 1,911 USGS topographic maps for Oregon are carried, as well as BLM, Geology, Forestry, Transportation and Water Resource Department maps.

The center has books available on many outdoor subjects. It carries materials from the many state and federal natural resource agencies. The information center is billing itself as a one-stop source for recreational and natural resource information.

The center is located in the State Office Building at 800 NE Oregon Street, Suite 177, Portland OR 97232 (in the building with a dome). Hours are 10am to 5pm, Monday through Friday. The phone number is (503) 731-4444. The center is run by the Oregon Department of Geology and Mineral Industries.

OREGON HIGH DESERT WILDERNESS MAP RELEASED

Emerald Imagery of Eugene has published a map of the Southeastern Oregon region that is covered by the proposed Oregon High Desert Protection Act. Production of *Visitor's Guide to Oregon High Desert Wilderness* was partially funded by grants from the Levinson and REI foundations, and was commissioned by a consortium of fifteen environmental groups, spearheaded by the Oregon Natural Desert Association of Bend.

The map details landforms in a graphic style. However, it lacks a description of the elevations so clearly shown in graduated colors. Also out-

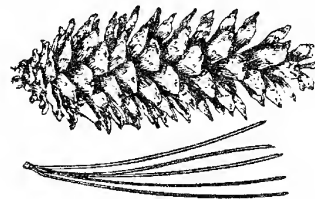
lined are lands proposed for protection under the Oregon High Desert Protection Act proposal. The proposed National Desert Trail is shown, as are important roads and highways of the region.

The back gives information about the many segments of natural areas which could be conserved under the act, as well as advice on travel in the isolated, little populated High Desert region. The area is for the most part south of Hwy. 26, east of Hwy. 31 and 97, extending to the state border. Isolated sections suggested for inclusion under the Act are scattered from just south of the Columbia to the Wallowas and to near Ashland.

Purpose of the map is to encourage more people to visit the wild, empty end of Oregon to see for themselves the high value of the High Desert wildlands. Developing a broad, informed constituency of people who have both visited the area and support its preservation is the goal of this mapping project.

The four-color map is entirely computer-produced with no underlying aerial or satellite image. Based on GIS mapping work by John Sharrard of Oregon State Service Center for Geographical Information Systems, the initial 390 megabyte file was transferred to a 32mb MacIntosh IICI for further work by Tom Pringle of Emerald Imagery. The final computer file was the size of 40,000 pages of text (about 3,400 months worth of NPSO *Bulletins*)! The computer output was reproduced as film negatives by Bruce Bayne and final printing was done by Koke Printing of Eugene.

The map can be ordered from Emerald Imagery, PO Box 3429, Eugene OR 97403 for \$4.95 plus 55¢ for mailing. It is available in bulk from the above or also from the Environmental Center in Bend. Contact them for volume discounts.



Pinus monticola

Western white pine

From *Trees Yearbook of Agriculture 1949*
United State Department of Agriculture

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GUIDELINES FOR CONTRIBUTORS

The NPSO *Bulletin* is published monthly as a service to NPSO members and the public. Contributions of all types are welcome.

DEADLINE: Copy is due with the editor by the 10th of each month.

Submissions can be in any form. Author's name & affiliation are at the end of the article. Double space between paragraphs. For special materials (e.g., plant keys) choose an appropriate format, keeping in mind that readers may wish to carry your article pasted inside their favorite field guide. Formatting assistance is available from your editor. All *Bulletin* articles now go into the new NPSO database via computer. Camera-ready copy is not used, with rare exceptions.

Computer output: The editor prefers articles submitted on Macintosh or IBM disks, or via modem. Contact the editor for details.

Illustrations: Line drawings, prints, and high contrast B&W prints are useable. Some Macintosh graphics can be used also. Contact the editor about our current needs, or send them along with your article.

Credits: If the item is not original, name and date the source. For original items, identify the author and indicate, for news items, if a by-line is desired. Indicate whether the item is to be used in its entirety or excerpted at the editor's discretion.

Scientific Names: Nomenclature should follow *Flora of the Pacific Northwest*, by Hitchcock et al., when appropriate. Use both scientific and common names if possible. *Italicize* genus and species, or underline.

Return of Originals: Submissions are not returned unless requested.

Membership in the Native Plant Society of Oregon is open to all.

Membership applications, renewals, and changes of address (include old address and zip code) should be sent to the Membership Chair.

NATIVE PLANT SOCIETY OF OREGON MEMBERSHIP FORM

Name _____

Chapter (if known) _____

Address _____

Is this a change of address?

If so, please write your *Old Address* here:

City _____ State _____ Zip+4 _____ - _____

Phone (Home) _____ (Work) _____

City _____ State _____ Zip _____

* **DUES** include monthly NPSO *Bulletin*. Full membership is for a calendar year, January through December. New memberships enrolled during September through December are charged a reduced "Quarter Membership" rate.

() New	() Renewal	() Quarter Membership (Sep.-Dec.) \$3.00	() <i>Bulletin</i> Subscription only \$12.00
() Student.....		\$ 8.00	() Sustaining.....\$ 30.00
() Regular.....		12.00	() Patron.....100.00
() Family Membership.....		18.00	() Life Member500.00

* CONTRIBUTIONS:

Leighton Ho Memorial Award Fund..... \$ _____
 Rare and Endangered Plant Fund..... \$ _____

* All contributions to the Native Plant Society of Oregon, a non-profit organization, are tax deductible. Please make checks for dues and contributions payable to NATIVE PLANT SOCIETY OF OREGON. Send completed form and full remittance to:

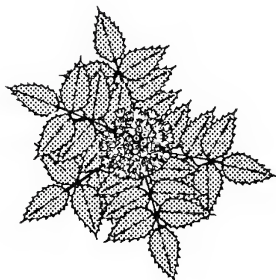
Jan Dobak, NPSO Membership Chair, 2584 NW Savier St., Portland OR 97210-2412.

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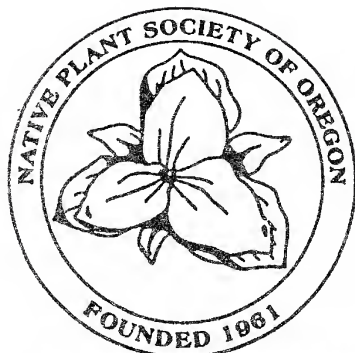
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Send change of address notices
and membership requests to:
Native Plant Society of Oregon
Jan Dobak, Membership Chair,
2584 NW Savier St.,
Portland, Oregon 97210-2412

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Dedicated to the enjoyment, conservation, and study
of Oregon's native vegetation

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Native Plant Society of Oregon PO Box 902, Eugene OR 97402

Membership inquiries: Jan Dobak, Membership, 2584 NW Savier St., Portland OR 97210-2412
For more society information, see the inside back cover.

IMPORTANT NOTE TO FIELD TRIP PARTICIPANTS:

Field trips take place rain or shine, so proper dress and footwear are essential. Trips may be strenuous and/or hazardous. Please contact the trip leader for information about difficulty, mileage, and terrain. Participation is at your own risk. Bring water and lunch. All NPSO activities are open to the public at no charge (other than carpool mileage), and friends, newcomers and visitors are always welcome.

Notice to field trip chairs and leaders: The Forest Service and other Federal agencies have set policies limiting group size in wilderness areas to 12. The reason for this is to limit the human impact on these fragile areas. Each group using wilderness must be no larger than 12.

STATE NEWS

26 Sept., Sat.

STATE BOARD MEETING at the Oregon State University Botany Department (Cordley Hall), in the 2nd floor Botany Conference Room at 10 am. Directions: follow Harrison Blvd. (off Hwy 34) west to Street; turn left (south) and follow 30th 4 blocks to Orchard; turn left (east) on Orchard; entrance to Cordley Hall is on the right (south) side of Orchard near 27th St. Bring lunch.

CHAPTER NEWS

Blue Mountain

For information call Jerry Baker (566-2244).

Corvallis

8 Sept., Tues.

MEETING. 7:30 pm at 3290 SW Willamette Ave. This meeting is to discuss conservation issues and the fall program. There will not be a speaker. Call Duncan Thomas (752-6529) for information.

Emerald

For information call Bruce Newhouse (343-2364).

High Desert

22 Sept., Tues.

MEETING. The first fall meeting will be a potluck social at Stu Garrett's house at 7pm (21663 Palama Drive) in northeast Bend. Call Stu (389-6981, eves.) if unsure of directions. Bring a main dish, salad, appetizer, or dessert and your own place setting. We will discuss chapter activities and meetings.

Mid-Columbia

2 Sept., Wed.

MEETING. 7:30pm at the Mosier School. A presentation on the "Ethics and Issues of Reintroducing Rare Plants" by Tom Kaye of the Corvallis NPSO Chapter.

North Coast

19 Sept., Sat.

FIELD TRIP: Bill Miles will lead a tour of Bear Creek Artichoke Nursery. Meet at the Nursery at 10am. Call Jim Winslow (842-2246) for more information.

29 Sept., Tues.

MEETING. 7pm at the Carl Rowe Meeting Room in the Tillamook PUD, 1115 Pacific, Tillamook. Program to be announced.

Date to be announced.

FIELD TRIP: Dr. Craig Roberts will lead a birding field trip. Date, time, and place to be announced. For information call Jim Winslow (842-2246).

Portland

5 Sept., Sat.

FIELD TRIP: Mirror Lake & Tom, Dick & Harry Mountain. For more information contact George Lewis (760-2316). Moderate hiking.

8 Sept., Tues.

MEETING. 7 pm at First United Methodist Church, 1838 SW Jefferson St., Portland. Charlene Simpson will present a slide program on the rare and endangered plants of Lane County that are of concern to the Emerald Chapter NPSO. Charlene is known for her beautiful photography.

19 Sept., Sat.

FIELD TRIP: Mount Hood Meadows. For more information contact George Lewis (760-2316). Moderate hiking.

Siskiyou

17 Sept., Thurs.

MEETING: Potluck in Glenwood Park, corner of Ashland St. & Glenwood Dr., 6:30pm, followed by meeting at 7:30pm in Room 171 of the Science Building of Southern Oregon State College. Bring five slides of your summer activities. The public is invited. For information call David Kennedy (535-6383).

19 Sept., Sat.

FIELD TRIP. David Steinfield, Assistant Manager of the USFS J. Herbert Stone Nursery, 2606 Old State Road, Central Point, will lead a tour of the nursery at 10 am. We will discuss new perspectives in biodiversity and yew regeneration. For information call Ginny Post (779-4102)

South Coast

For information on the pending formation of this chapter, contact Bruce Rittenhouse (888-9328).

Umpqua Valley

10 Sept., Thurs.

MEETING: 7pm in Room 311 of the Douglas County Courthouse.

12 Sept., Sat.

FIELD TRIP: To see *Aster vialis*. Leave at 7:45am from the BLM parking lot, 777 Garden Valley Rd. For information, call Russ Holmes (672-4635).

Willamette Valley

12 Sept., Sat.

FIELD TRIP: Breitenbush Lake—in the Cascades east of Detroit Lake. Beautiful area for fall colors. Leave from Dallas Safeway parking lot at 9am. Call Leader Wilbur Bluhm (393-2934) for details.

21 Sept., Mon.

MEETING: 7pm in Room 225 of the First United Methodist Church at 600 State Street (corner of Church & State), Salem. Jim Crane will present a program entitled "Meadowfoam – from wildflower to commercial crop" He has been researching meadowfoam for 23 years through OSU.

William Cusick

* * * * *

For information, call Bob Ottersberg (742-6200).

BOOK REVIEW:

HERE IS AN OUTSTANDING NEW BOOK ON FOREST ECOLOGY

The Olympic Rainforest: An Ecological Web, by Ruth Kirk with Jerry Franklin, University of Washington Press, Seattle, 1992. 128 pp., line drawings, 146 photos, maps, bibliography, glossary, index, 8.5" X 11".
Price: \$35.00 (cloth); \$17.50 (paper).

I am delighted with The Olympic Rainforest: An Ecological Web, an outstanding new book on Northwest coniferous rainforest ecology, by Ruth Kirk with Jerry Franklin.

As an example of nature writing, the book is at the top of its class. Ruth Kirk's knowledge of the Northwest is impressive and her prose is eminently readable. The stunning color photos of the rain forest by the author and her husband, Louis Kirk, a former ranger-naturalist for Olympic National Park, are heart-wrenchingly beautiful. Beyond this, however, what takes The Olympic Rainforest beyond the realm of nature writing and makes it an important reference work, are its up-to-date and scientifically correct descriptions and explanations of forest ecosystems, presumably contributed in large part by the University of Washington's Jerry Franklin, whom we in NPSO know as the world leader in old growth research.

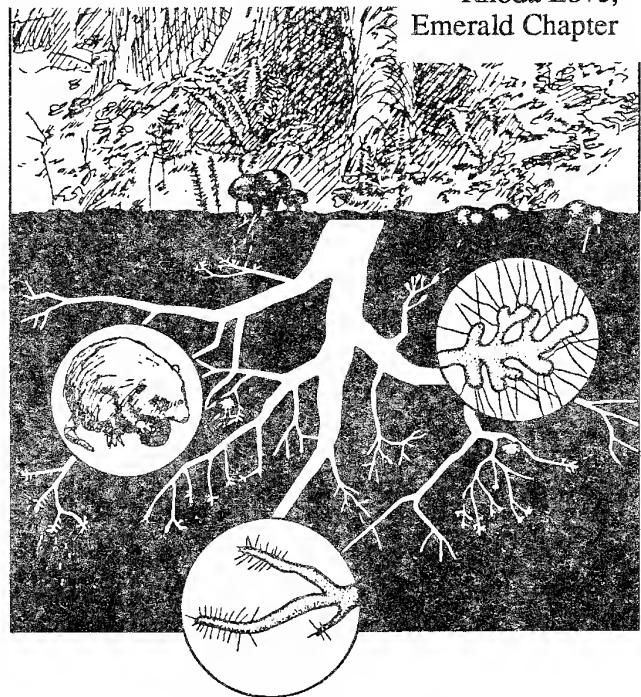
If you want a single volume which summarizes and synthesizes the recent decades of work on old growth ecology which have taken place in Oregon's H. J. Andrews Experimental Forest and on the Olympic Peninsula by Franklin and his associates, here is the reference you are looking for. Franklin's own research as well as that of Chris Maser, Bill Denison, Fred Swanson, Jim Trappe, Nalini Nadkarni and others who have added to our understanding of the old growth forest is all summarized here. These are our new foresters who have explained the complicated and essential roles of fungi, lichens, mosses, and animals such as insects, birds, and rodents in the structure and health of our ancient and magnificent west-side coniferous forests.

Have you wondered what important role is played by truffles in the old growth forest ecosystem? Wondered why and how mice and voles inoculate the soil with spores of essential mycorrhizal fungi? Perhaps you would like to know how the slow-growing *Lobaria*, the lung lichen, enriches the soil beneath its host tree. Do you know why

downed wood is essential to a regenerating forest? Have you ever heard of scuzz? What is the hyporheic zone of a stream and what lives there? Can you imagine how a Hawaiian chief could own a Douglas fir outrigger canoe? Or, on a lighter note, do you know what happens when a bull elk falls in love with a dairy cow? The answers to these questions and many more can be found here.

Last year (NPSO Bulletin, December, 1991), I reviewed that superb new book on Northwest ecology, Arthur R. Kruckeberg's The Natural History of Puget Sound Country. Now here, fast on its heels, is yet another outstanding volume from the same publisher. Bravo, University of Washington Press! I'm very proud of my old school press's obvious commitment to print the finest in Northwest ecological writing. I heartily recommend The Olympic Rainforest: An Ecological Web, by Ruth Kirk and Jerry Franklin to all readers who care about and wish to know more about our beautiful and unique Northwest forests.

Rhoda Love,
Emerald Chapter



This drawing from The Olympic Rainforest: An Ecological Web "shows fungal hyphae...contacting roots; the resulting mycorrhizae (right Circle); a non-mycorrhizal root with root hairs (bottom circle); and a red-backed vole eating a truffle (left circle)."

BLM SPONSORING RARE PLANT SPECIES

To safeguard against the extinction of plants native to the Northwest, the U.S. Bureau of Land Management (BLM) has joined efforts to sponsor rare plant species through the national Center for Plant Conservation (CPC). The Center maintains a comprehensive program of plant conservation, research, and education through cooperating regional centers.

In a June 9 ceremony, the CPC presented BLM with a pair of original watercolors in recognition of the Vale District's sponsorship of two endangered eastern Oregon plant species.

Don Falk, Director for the CPC, presented the paintings to BLM's Oregon / Washington State Director D. Dean Bibbes, and to Vale Associate District Manager Geoffrey Middaugh and district botanist Jean Findley. The event took place in Portland at the Berry Botanic Garden, responsible for CPC's regional seed bank. The seed bank now contains more than 200 species, subspecies, and varieties of the region's rarest plants.

"The efforts of dedicated botanists like Jean set a good example for other districts and other agencies to get involved in protecting and preserving rare plants throughout the region," said Bibbes. "Only by ensuring their survival can we maintain the full variety within native ecosystems."

The watercolors, created by botanical artist Bobbi Angell, depict smooth blazing star and Biddle's lupine, both species sponsored by BLM. The agency is also a sponsor of Mulford's milkvetch and Malheur wire-lettuce. "These paintings take the plants out of the background and focus on their beauty and uniqueness," said Dr. Linda McMahon, Executive Director of the Berry Botanic Garden.

Smooth blazing star, a small annual with bright yellow flowers, grows only on fragile ash outcrops in the desert of southeastern Oregon, northern Nevada and southwestern Idaho. The plant was petitioned as a threatened species in 1991 because of its extreme rarity, its narrow range and specific habitat, and because of its vulnerability to disturbance.

Biddle's lupine, which grows primarily on the border of Malheur and Harney counties, is a perennial lupine with light yellow flowers that bloom in early spring. The species, vulnerable to both rodents and human activities, grows only in Oregon.

BLM's Vale District became a sponsor of the rare plants in 1990 by contributing \$5,000 per plant, an amount matched by the Mellon Foundation. Sponsorship contributions are used to maintain permanent seed banks kept at sub-zero temperatures, as well as a living collection of endangered flora under protective cultivation. This strategy will prevent the total extinction of rare species and provide plants for reintroduction or studies as necessary.

"The willingness of the BLM and others to sponsor rare plants provides continuing opportunities for scientists and biotechnicians to study them," explained McMahon. "From the core collection, plants can be propagated for research that the wild populations are too fragile to endure. Conservationists managing these species in the wild can learn from horticultural experiments how to strengthen and increase those populations, helping them persist."

—Leslie Robinette

A HYBRID FERN NEW TO OREGON

Ferns of an unusual shade of green....Last fall that clue triggered the discovery of a hybrid fern never seen before in Oregon. The parents of this new hybrid are the familiar sword fern (*Polystichum munitum*), and the Anderson shield fern (*P. andersonii*). Both parents are dark green in color, while the hybrid plants are brighter, more of a lime-green shade.

The plants were found last summer on the Bureau of Land Management's (BLM) Salem District by Clackamas Resource Area's Botanist, Mike Woodbridge. The finding of the new hybrid plants came about as Woodbridge, on an Area of Critical Environmental Concern monitoring assignment, caught a glimpse of the striking color, and investigated. Climbing a 15-foot roadbank (overgrown with devil's club) he counted a colony of about 200 ferns. Not quite half of these were Anderson shield fern, while more than 100 plants were the hybrids, intermediate in morphology between sword fern and Anderson shield fern.

Hybridization between these two fern species is quite rare, according to Dr. David Wagner, University of Oregon botanist, who later visited the site with Woodbridge, and confirmed the identification. Progeny of this cross had never been reported previously from Oregon, and only three times from the Northwest, in Washington and Alaska.

Several features are significant about the hybrid site. Dr. Wagner considers the size of the colony and the vigorous growth of the offspring particularly striking. He and Woodbridge believe that habitat disturbance may be involved in the successful establishment of the progeny. In general, fern hybrids are "between a rock and a moist, bare substrate" in terms of opportunity for establishment.

In our region, most species of plants in the same genus occupy slightly different habitats. Hybridization is most likely to take place when the different habitats are contiguous (right next to one another) and the parent species are found in close proximity. In this case, however, both polystichums grow naturally in the same type of habitat. (Co-occurrence of these two species is rare because Anderson shield fern is so uncommon. This locality is significant even for the abundance of both parent species growing together!) The hybrids will originate and persist in the ecotone between the habitats. Disturbance often creates such a "hybrid habitat" as well as creating numerous microsites offering many chances for new individual ferns to become established.

In their natural habitat the obstacles to hybridization are the general ones limiting reproduction of the parent species: very few sites are available for spore germination and subsequent fertilization of gametophytes to establish a new individual.

Fern spores need moist, bare mineral soil to germinate and thrive. Such microsites are rare in an undisturbed forest. The disturbance caused by logging on this site facilitated hybridization not because it created hybrid habitat but because it opened up many suitable microsites for reproduction. Bare soil was turned up and the seepy hillside kept it moist. With so many opportunities for gametophytes to grow, the chances of gametophytes from the two different species growing next to each other and exchanging gametes was greatly enhanced.

Another favorable feature of the hybrid progeny appears to be an intriguing and extremely advantageous reproductive mechanism. We're all familiar with the sporangia producing stage in ferns, when the fronds bear clusters of small brown sori (sometimes called "fruit dots") on the lower sides. However, in hybrids spore formation usually is poor and even vigorous plants are almost always sterile. But ferns and many other vascular plants often take "reproductive shortcuts", involving various means of asexual or vegetative reproduction. A common example is bracken, which forms large clones (genetically identical individuals) as underground stems spread. In the Northeast, the "walking fern" (*Camptosaurus rhizophyllus*) produces arching leaves which root at the tips, sprouting new plants. Here in the Northwest, the fronds of the Anderson shield fern form vegetative buds on the upper pinnae. As the fronds droop, these buds begin to take root, forming plantlets identical to the original fern.

Fortunately for the new Oregon hybrid, the progeny displays the same capability to form buds on the fronds as does Anderson shield fern. The offspring are not dependent on sexual reproduction for new individuals to spread out and colonize the available habitat; the ability of the hybrid to "clone" may explain the vigor and size of the BLM Clackamas Resource Area colony. Dr. Wagner and Woodbridge are continuing observations on the growth and life cycle of the unusual hybrids. This double advantage of vegetative reproduction and local habitat availability seems to have given this unusual hybrid a ticket to establish residency in Oregon.

—Claire Johnson, BLM Botanical Volunteer
and David Wagner, University of Oregon

KALMIOPSIS

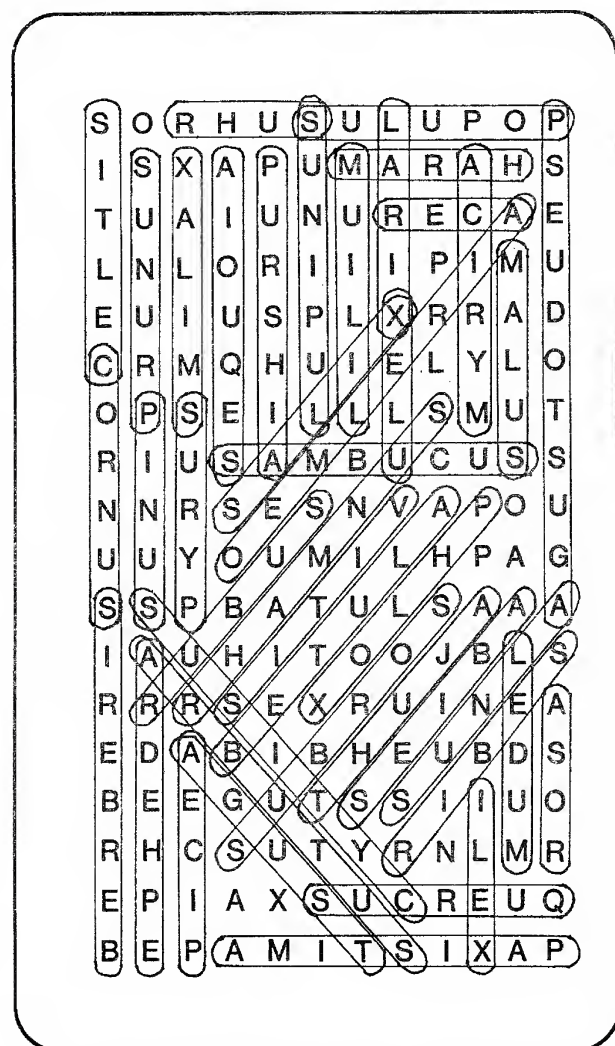
By now you should have the 1992 issue of *Kalmiopsis*. My thanks to my fellow editors, Stu Garrett, Rhoda Love and Susan Kephart, and the authors for making it possible. Due to many unforeseen "incidents", the issue was delayed several months. I hope you like this issue of *Kalmiopsis* as much as I appreciated the handsome wood box that Barbara Mumblo so graciously accepted on my behalf at the annual meeting.

--Frank A. Lang
Kalmiopsis Editor

EFO—WORKPLACE GIVING FOR THE ENVIRONMENT

The Environmental Federation of Oregon (EFO), which the NPSO joined two years ago, offers an easy, convenient way for you to support the Native Plant Society of Oregon. By taking advantage of workplace giving, employees of EFO-participating companies can choose to help 23 of Oregon's leading environmental organizations.

If your company is listed below, watch for EFO campaign materials this fall. If you decide to give you'll receive all the membership benefits of direct donation, without the hassle of licking a stamp or finding a mailbox. If you designate your donation to go to the Native Plant Society of Oregon, then 100% of your donation will go directly to the NPSO, with no deductions, service charges or administrative fees.



EFO doesn't have a big staff with high salaries or fancy perks. Working out of a small downtown Portland office, a 3 person staff (top salary \$28,000) coordinates workplace giving campaigns that have raised over half a million dollars to benefit Oregon's environmental organizations. Members like NPSO have been contributing 50 to 100 hours of service yearly to help run EFO.

For more information on setting up an EFO workplace giving program where you work, contact the NPSO EFO board representative, Jimmy Kagan (233-1048) or Louise Tippens of EFO (223-9015).

The EFO will host a kick off for this fall's campaign at noon, Thursday Sept. 17th, in Terry Schunk Plaza at 4th & Madison in downtown Portland. Live music will be performed by the Latin American group Condor. This event will be a good opportunity to show support for Oregon's conservation community.

The NPSO and EFO would like to thank the following organizations for their participation in this convenient and effective means of supporting Oregon's environmental community:

Combined Federal Campaigns:
Benton Deschutes, Jackson, Lane, and Marion Counties, and Portland Tri-County Area.

1000 Friends of Oregon • Avia Shoes •
City of Ashland • City of Corvallis •
City of Portland • Colonial Pacific Leasing •
Dynagraphics • Emerald People's Utility District •
Graphics Arts Center • Kettle Foods •
Linfield College • Metropolitan Service District •
Multnomah County • Nike •
Oregon Research Institute • Pacific University •
Port of Portland • Premier Press • Reed College •
Recreational Equipment, Inc. • State of Oregon.

SOLUTION TO LAST MONTH'S WORD PUZZLE

The plant name that can be made from the unused letters is *Oplopanax*, the devil's club.

Rate your results according to how many genus names you found by the following scorecard:

40-43	Genius level	27 or below — I said
36-39	Very sharp	the puzzle was devil-
32-35	No slouch	ish! —Ken Chambers
28-31	Passable	Corvallis Chapter

METROPOLITAN GREENSPACES

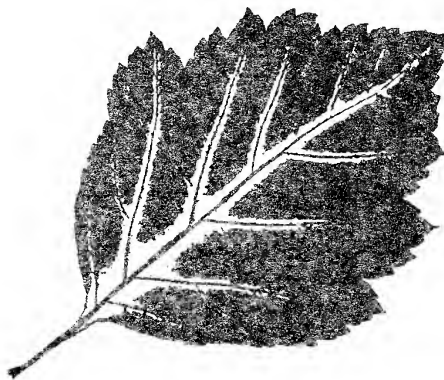
The Portland metropolitan area has been the scene of some extraordinary regional cooperative planning. The Metropolitan Service District (MSD) has spearheaded efforts by local governments, citizen's groups, and environmental organizations to identify local wild areas and to develop a comprehensive regional plan—Metro Greenspaces—to protect the most important greenspaces surviving in this rapidly developing urban region. Already experiencing continuous expansion, the Portland metro four-county area is predicted to add 480,000 people in the next 20 years. This potential growth makes it imperative that adequate park and open space be set aside now in order to preserve our quality of life and the shrinking remnants of the natural landscape. Only 9% of the greenspaces around us are in public ownership—the remainder is in private hands and subject to possible future development. Continually rising land values and the shrinking availability of significant open spaces make it impossible to wait for later.

We tend to take the still large expanses of open space in the Portland area for granted. They are an important aspect of the livability of our region. Yet each time another favorite forest or field suddenly sprouts structures, we are outraged. 91% of all the fields and forests in this urban area actually have nothing between them and the bulldozers but time.

The many local parks districts of our area have been falling behind in park acquisition compared to what was accomplished earlier in this century. Portland itself has a good amount of parks only in the older parts of the city. The Metro Greenspaces proposal would not put all acquisitions in the hands of MSD, but would cooperate with local parks districts to finance new open space.

The proposed Metro Greenspaces bond measure would produce \$150-200 million for the purpose of preserving the livability of the Portland area. Because the bond issue will cover the entire metro area, the financial impact on the individual would be small. The increase in property taxes would average \$18 to \$24 for a \$100,000 house yearly over thirty years—a cost of no more than 10¢ a day for the average homeowner. This is a small cost for what is to be gained. The MSD priority list for protection includes lands with old growth, wetlands, heron rookeries, volcanic buttes, a region-wide network of trails, creeks, greenways along the Columbia, Willamette, and Clackamas Rivers, and much else. Please help by voting YES November 3rd. The effort to pass the measure needs volunteers and financial contributions. Call 241-7159 for information or to volunteer to help pass the measure. Or write:

CITIZEN'S CAMPAIGN FOR GREENSPACES
1101 NW HOYT ST.
PORTLAND OR 97209



THE PLANT PUZZLE

Sponsored by the Siskiyou Chapter

Do you recognize this plant? The first person to give the correct scientific name will win a prize. The illustrated leaf is from a native woody species.

Send your guess on a postcard to:
Peter Zika

4230 NW Clubhouse Pl. #1
Corvallis, OR 97330

Carolyn Wright of Dufer solved the August puzzle, with *Juniperus communis* (common juniper), *Prunus virginiana* (choke cherry), and *Rhus radicans* (poison ivy).

BITS AND PIECES

—NEWS AND INFORMATION FROM ALL OVER

FIRST ANNUAL HIGH DESERT CONFERENCE ANNOUNCED

This promising conference will be at Malheur Field Station Thursday, September 24th through Saturday the 26th, 1992. With "Striving for the Future: Sustainable Development for South-eastern Oregon", the organizers wish to interest "all people interested in discussing the future of Oregon's High Desert".

The future of growth management and preservation in southeastern Oregon is based on actions that take place in a legal, economic, political, biological and historical complex. If the area is to develop and survive into the next century, planning must take place soon. The Great Basin Society, Inc., (which also runs Malheur Field Station) has invited speakers, workshop / discussion coordinators, and field trip leaders from different sides of many fences to share a broad range of opinions on the region's future. They include local ranchers, government officials, Sierra Club people, paleo- and regular botanists, and an economist. A country music social and entertainment wraps things up Friday, with field trips Saturday.

Malheur Field Station is near Malheur National Wildlife Refuge and is a world-renowned birding area. It is within sight of Steens Mountain. The Station is about seven hours from Portland. The trip to it should feature good mountain fall color at this time. It was the site of this year's NPSO Annual Meeting.

The Field Station folks advise that space is limited so early registrations are advised. Conference fee will be \$35. Lodging at Malheur Field Station is a bargain at \$11 per night. Meals are also reasonable, or you can bring your own. The Field Station is asking for a \$50 deposit to reserve your space, with the balance due at the door (or obtain their form and figure the exact amount with lodging and meals). Cutoff for ordering meals will be Sept. 17th. You can register at the door if space is still available, but call ahead. Contact Malheur Field Station at:
MALHEUR FIELD STATION
HC 72 BOX 260
PRINCETON OR 97721
(503) 493-2629

HISTORIC HIGHWAY SCENIC CORRIDOR PROTECTION EFFORT UNDERWAY

The Friends of the Columbia Gorge has initiated an effort to create a 5.9 mile long "Historic Highway Scenic Corridor" between Hood River and Mosier. The Old Columbia River Highway, built here in the 1920's, hangs in this area virtually on the face of the cliffs. Twin tunnels 260 ft. and 60 ft. long are perched 500 above the River. This is a most spectacular section of the old highway. The Old Columbia River highway is listed on the National Register of Historic Places and is a candidate for National Landmark status. The American Society of Civil Engineers has recognized it as a National Engineering Landmark. In 1924 much of the area was set aside as a Scenic Wayside.

The area has old growth Douglas fir and Oak woodlands, with old ponderosa pine mixed in. The proposed park is in a transitional zone changing from Western Oregon forests to oak-pine woodlands. It includes such rare plants as the Gorge endemics Barrett's penstemon (*Penstemon barrettiae*) and bunchgrasses.

The area is in mixed ownership, with the Forest Service, Hood River County, and private interests being the largest holders. Hood River County is threatening to clearcut some of its holdings, though there is the potential of a Forest Service land exchange to prevent this. Current uses of land along the old road include target ranges, an apple dump, and a large gravel quarry.

Despite being built on very steep land, the road surface is flat enough to allow wheelchair access. No vehicular traffic would be allowed in most of the area. Biking and hiking, picnicking and wildlife and wildflower viewing would be ideal uses. Some of the area, bounded by high cliffs and accessible only by the now-closed highway, have never seen any alteration other than the roadway.

For more information about the proposed Scenic Corridor, contact the Friends of the Columbia Gorge at:
FRIENDS OF THE COLUMBIA GORGE
PO BOX 40820
PORTLAND OR 97240-0820
241-3762

STATE OFFICERS

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 EMERALD (Eugene)..... Bruce Newhouse..... PO Box 902, Eugene 97405; 343-2364
 HIGH DESERT (Bend)..... Cindi O'Neil..... 22100 Sweetgrass Dr., Bend 97701; 389--3085
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 NORTH COAST..... Jim Winslow..... 8750 Valley View Dr., Tillamook 97141; 842-2246
 PORTLAND..... John King..... 3320 SW 100th Ave., Portland 97225-2940; 292-6539
 SISKIYOU..... David Kennedy..... 8394 Wagner Creek Rd., Talent 97540; 535-6383
 UMPQUA VALLEY (Roseburg) Ted Schattenkerk..... 3805 Hwy #42, Winston 97496-9546; 679-6953
 WILLAMETTE VALLEY (Salem) Kathy Connolly..... 12611 Centerwood Rd. SE, Jefferson 97352; 327-1212
 WM. CUSICK (LaGrande) ... Bob Ottersburg..... PO Box 885 LaGrande 97850; 963-4907

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 KALMIOPSIS EDITOR..... Frank Lang..... 535 Taylor St., Ashland 97520; W-552-6341; H-482-5235

GUIDELINES FOR CONTRIBUTORS

The NPSO *Bulletin* is published monthly as a service to NPSO members and the public. Contributions of all types are welcome.

DEADLINE: Copy is due with the editor by the 10th of each month.
Submissions can be in any form. Author's name & affiliation are at the end of the article. Double space between paragraphs. For special materials (e.g., plant keys) choose an appropriate format, keeping in mind that readers may wish to carry your article pasted inside their favorite field guide. Formatting assistance is available from your editor. All *Bulletin* articles now go into the new NPSO database via computer. Camera-ready copy is not used, with rare exceptions.
Computer output: The editor prefers articles submitted on Macintosh or IBM disks, or via modem. Contact the editor for details.

Illustrations: Line drawings, prints, and high contrast B&W prints are useable. Some Macintosh graphics can be used also. Contact the editor about our current needs, or send them along with your article.
Credits: If the item is not original, name and date the source. For original items, identify the author and indicate, for news items, if a by-line is desired. Indicate whether the item is to be used in its entirety or excerpted at the editor's discretion.

Scientific Names: Nomenclature should follow *Flora of the Pacific Northwest*, by Hitchcock et al., when appropriate. Use both scientific and common names if possible. *Italicize* genus and species, or underline.

Return of Originals: Submissions are not returned unless requested.

Membership in the Native Plant Society of Oregon is open to all.

Membership applications, renewals, and changes of address (include old address and zip code) should be sent to the Membership Chair.

NATIVE PLANT SOCIETY OF OREGON MEMBERSHIP FORM

Name _____

Chapter (if known) _____

Address _____

Is this a change of address?

If so, please write your *Old Address* here:

City _____ State _____ Zip+4 _____

Phone (Home) _____ (Work) _____

City _____ State _____ Zip _____

* **DUES** include monthly NPSO *Bulletin*. Full membership is for a calendar year, January through December. New memberships enrolled during September through December are charged a reduced "Quarter Membership" rate.

() New	() Renewal	() Quarter Membership (Sep.-Dec.)	\$3.00	() <i>Bulletin</i> Subscription only	\$12.00
() Student.....			\$ 8.00	() Sustaining.....	\$ 30.00
() Regular.....			12.00	() Patron.....	100.00
() Family Membership.....			18.00	() Life Member	500.00

* CONTRIBUTIONS:

Leighton Ho Memorial Award Fund. \$ _____

Rare and Endangered Plant Fund. \$ _____

* All contributions to the Native Plant Society of Oregon, a non-profit organization, are tax deductible. Please make checks for dues and contributions payable to NATIVE PLANT SOCIETY OF OREGON. Send completed form and full remittance to:

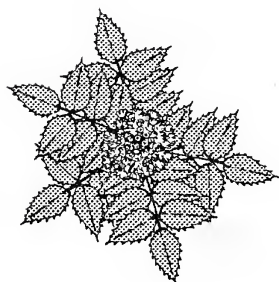
Jan Dobak, NPSO Membership Chair, 2584 NW Savier St., Portland OR 97210-2412.

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Send change of address notices
and membership requests to:
Native Plant Society of Oregon
Jan Dobak, Membership Chair,
2584 NW Savier St.,
Portland, Oregon 97210-2412

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**NATIVE PLANT SOCIETY
OF OREGON**

Dedicated to the enjoyment, conservation, and study
of Oregon's native vegetation

VOLUME 25 NUMBER 10

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Native Plant Society of Oregon PO Box 902, Eugene OR 97402

Membership inquiries: Jan Dobak, Membership, 2584 NW Savier St., Portland OR 97210-2412
For more society information, see the inside back cover.

IMPORTANT NOTE TO FIELD TRIP PARTICIPANTS:

Field trips take place rain or shine, so proper dress and footwear are essential. Trips may be strenuous and/or hazardous. Please contact the trip leader for information about difficulty, mileage, and terrain. Participation is at your own risk. Bring water and lunch. All NPSO activities are open to the public at no charge (other than carpool mileage), and friends, newcomers and visitors are always welcome.

Notice to field trip chairs and leaders: The Forest Service and other Federal agencies have set policies limiting group size in wilderness areas to 12. The reason for this is to limit the human impact on these fragile areas. Each group using wilderness must be no larger than 12.

CHAPTER NEWS

Blue Mountain



For information call Jerry Baker (566-2244).

Corvallis

10 Oct., Sat.

WORKSHOP: Seed and cutting propagation of native plants 10 am to noon. If interested, call Loren Russell (752-7558).

12 Oct., Mon.

MEETING. NEW LOCATION: Unitarian Fellowship at 2945 NW Circle Blvd. Corvallis. At 7 pm there will be a conservation issues meeting. At 7:30 pm Manuela Huso will talk on purple loosestrife in Oregon and its biological control. Call Esther McEvoy for information (754-0893).

Emerald

12 Oct., Mon.

MEETING. Junior Robertson will give slide show & discussion on East Alton Baker Park charter amendment. 7 pm. at Morse Ranch Park. From downtown Eugene, take Willamette St. S. to Crest Dr. (Rt. thru. "Y" for Donald, between 32 & 33rd. Ave. E.). Turn right (W.) on Crest and proceed about 4 blocks. Turn right into Wayne Morse Ranch Park parking lot. Walk east to the white farmhouse.

24 Oct., Sat.

WORK PARTY. Amazon Park native prairie restoration. Bring shovels, gloves for digging tall fescue. Dress for work, rain or shine. Seeds & bulbs from eight local native populations will be provided. Meet on the Amazon bike path, northwest of the Amazon Community Center, 2700 Hilyard, Eugene, 10 am.

9 Nov., Mon.

MEETING. Tom Kaye on Monitoring Lane County's federally listed rarities: Bradshaw's lomatium and tall bugbane. Slide show & panel with Jennifer Dimling and Nancy Wogan, local USFS & BLM botanists. 7 pm at Morse Ranch Park. From downtown Eugene, take Willamette St. S. to Crest Dr. (Rt. thru. "Y" for Donald, between 32 & 33rd. Ave. E.). Turn right (W.) on Crest and proceed about 4 blocks. Turn right into Wayne Morse Ranch Park parking lot. Walk east to the white farmhouse.

More information? Call Bruce Newhouse (president 343-2364) or Ethen Perkins (programs 345-3944).

High Desert

* * * * *

For information call Cindi O'Neil (389-3085).

Mid-Columbia

7 Oct., Wed.

MEETING: 7:30 pm at the Mosier School. Ed Guerrant, Conservation Director of the Berry Botanic Garden, will present the program "Reintroduction of Native Plant Species as a Conservation Tool". It will feature *Penstemon barrettiae* and *Stephanomeria malheurensis*.

North Coast

* * * * *

FIELD TRIP: To be announced.

27 Oct., Tues.

MEETING: 7pm at the Carl Rawe Meeting Room in the Tillamook PUD, 1115 Pacific, Tillamook. Jerry Igo of the Mid-Columbia NPSO Chapter will give a presentation on showy wildflowers of Oregon.

Portland

13 Oct., Tues.

MEETING: 7 pm at the meeting room of the Washington Park Zoo, near upper end of parking lot at Gate G, Portland. {Note the change of place for this month only.} Joy Belsky will give a presentation, with slides of her climb up Tanzania's Mt. Kilimanjaro, starting with tropical rainforest and ending at the glaciers at the top. She will discuss the evolutionary pressures resulting in the unusual adaptations of plants to high altitudes at the equator. Joy recently moved to Portland after 12 years of research in Tanzania and Kenya for Syracuse and Cornell Universities.

Siskiyou

15 Oct., Thurs.

MEETING: 7:30 pm in Room 171, Science Building, Southern Oregon State College. Public invited. Program to be announced. For information call David Kennedy (535-6383).

South Coast

For information on the pending formation of this chapter, contact Bruce Rittenhouse (888-9328).

Umpqua Valley

8 Oct., Thurs.

MEETING: 7 pm in Room 311 of the Douglas County Courthouse.

17 Oct., Sat.

FIELD TRIP: To see mushrooms and other fungi and discuss the roles they play in the forest community. Leave at 7:45am from the BLM parking lot, 777 Garden Valley Rd. For information, call trip leader Jack Hausotter (874-2462).

Willamette Valley

19 Oct., Mon.

MEETING: 7 pm in Room 225 of the First United Methodist Church at 600 State Street (corner of Church & State), Salem. Frank Kolwicz, past Willamette Chapter President and a professional photographer, will present a program on "Plant Photography".

16 Nov., Mon.

MEETING: 7 pm in Room 225 of the First United Methodist Church at 600 State Street (corner of Church & State), Salem. Mike Fahey will present a program on "Flowers and Seeds of the Columbia Gorge".

16 Nov., Mon.

WORKSHOP: Bruce McCune, professor of botany at Oregon State University, will lead a Lichen Workshop at Silver Falls State Park. Meet at 9 am at the cabin behind the Main Lodge Building in the Park.

William Cusick

6 Oct., Tue.

MEETING: 7:00pm ESD Office, 2100 Main Street, Baker City, Oregon. Paula Brooks will present a slide show on trees and shrubs of northeast Oregon.

10 Oct., Sat.

FIELD TRIP: 10am Oregon Trail Interpretive Center, Virtue Flat, East of Baker City. Alan Bahn, a range scientist with the Soil Conservation Service in Baker City will lead a tour of the vegetation at the interpretive center.

17 Oct., Sat.

WORK PARTY: 9am Gangloff Park, west edge of LaGrande along the old highway. This will be a cleanup day, preparation of the site for planting natives and salvage of plants from a highway construction site. Contact Kent Coe (962-7049) or Lucinda Heber (963-9214).

24 Oct., Sat.

WORK PARTY: 9am Gangloff Park, LaGrande. Planting of new materials. Contact Bob Ottersberg 963-4907.

Welcoming Our New Members...

Here's our new members from May 31st thru August 1st:

Corvallis

Chris Gardner
Katherine Hunt
Aaron & Sara Liston
Carolyn Pearson

Emerald

Dawn Meckleson

High Desert

Leslie Gecy
Cynthia & John & Ayla Glenn
Mary Morton
Robert Nobile
Barbara E. Russell
Linda C. Weaver
Mary Alice Willson

North Coast

Jeri Hise
Byron D. Ruppel

Portland

Beverly Bach
Joy Belsky
Edwin Chinn
Julie Gates
Carolyn McAlear
Rick & Nora Miller
Magdalen Rebholz
Kitty Wheeler
Kathleen Wilson

Siskiyou

Dianne Louise Keller
Linda Knight

Umpqua Valley

Jody & Dan DeLand
Anna Slemmer

Willamette Valley

Susan R. Hall
Josh & Barbara Reese
Art & Sandi Reinke
Janvier Slick
Patricia A. Wheeler

William Cusick

Donna & Mike Higgins

RARE PLANT FIELD STUDY

LOMATIUM GREENMANII

Known only from alpine meadows and rocky outcrops on the top of Mt. Howard and Ruby Peak in Oregon's Wallowa Mountains, *Lomatium greenmanii* (Greenman's desert parsley) was the subject of a June 1992 field study developed and directed by Tom Kaye of the Oregon Department of Agriculture (ODA) and co-sponsored by the US Forest Service. Thanks to a grant-in-aid by the Native Plant Society of Oregon, I was able to assist the ODA research team as a field botany intern, an exciting opportunity to contribute to rare and endangered plant research.

The study site on Mt. Howard is set in an incredibly beautiful location at 8,256 feet overlooking the Eagle Cap Wilderness, the near perfect glacier moraines of Wallowa Lake, and Hells Canyon to the east. Our field team experienced probably the best and the worst of field conditions, including clear skies interspersed with freezing temperatures and snowstorms, as we established transects and measured plant size and density. A tramway takes thousands of visitors each year up a 4,000 foot ascent in small gondolas to this spectacular location. The unique habitat for *Lomatium greenmanii* occurs in profusion only on the Mt. Howard summit, and the impact of such frequent human visitors was the main interest of our field research.

Lomatium greenmanii is listed as threatened by the State of Oregon and is a candidate for federal listing under the Endangered Species Act. In 1988 Tom Kaye began monitoring *L. greenmanii* and studied plant characteristics along five transects located in areas of low, medium and high human disturbance levels. In a cooperative effort between ODA and the Wallowa-Whitman National Forest, facilitated by botanist Marty Stein, the 1992 research included setting up an extensive and long-term monitoring system to be incorporated into ongoing federal work on the species. The results will provide accurate information to assist the Forest Service in routing trails and improving the visitor interpretation system so that *L. greenmanii* is protected from future disturbance.

Our work on Mt. Howard included reestablishing the previous five monitoring transects, surveying and mapping the *L. greenmanii* populations onto an aerial photo, and setting up seven new transects in representative areas. Tom also collected pollinators for comparison with the those collected in

the 1988 study. *Lomatium greenmanii* is a low-growing perennial generally less than 10 cm in height with moderately dissected leaves, a broad caudex, and umbels of tiny yellow flowers borne on scapes. As observed previously, we found *L. greenmanii* specimens in high impact areas to be generally more stunted, less reproductive, and more scattered than those from untrampled areas.

We set out to work June 26th with the Forest Service staff. Our attempt to drive to the top of Mt. Howard was unsuccessful due to impassably wet roads, so we commuted in the gondola to our work site. Using photos of the old transect locations, we scoured the ground trying to locate steel spikes left behind in 1988 to mark the sites. The problem caused by human trampling was immediately evident. We observed a network of planned and unplanned trails, bare of vegetation for up to 6 feet, and a tendency for visitors excited by the wondrous view and alpine flora to wander everywhere, unaware that a rare plant often lay at their feet.

The top of Mt. Howard consists of several hundred acres of gentle slopes with alpine meadows, tundra, and some rocky outcrops which fall off sharply to the valley below. We observed scattered whitebark pine, heather, lupine, grasses and many other species, as well as pesky chipmunks, rabbits, and deer all in close proximity. *Lomatium greenmanii* was observed in both meadow and rocky locations throughout a large portion of this area. One of our first challenges in data collection was isolating single plants, since individuals of the species often grow closely intermingled. Relatively large patches of *L. greenmanii* with numerous long scapes were observed in remote areas away from the tram buildings.

During the next few days our field team, including Matt Carlson, Lupin Loel, and Angie Ruzicka, collected data concerning plant size and density of *L. greenmanii* along 5 meter transects. We randomly selected individual plants in 100 cm x 25 cm plots along the transect, then measured the plant size, number of umbels, average scape length, and maximum phenology (many were fruiting). We also counted the number of plants and estimated percent cover for *L. greenmanii* in each plot. Since Tom had placed some original transects near very popular viewpoints, we received many questions from curious visitors as we

worked. After we explained our rare plant study, I was pleasantly surprised at the interest and enthusiasm the general public expressed about the plant and what we were doing. At least one person took a home video with closeups of *L. greenmanii*.

In the final days of our work we set up the new transects and collected plant data with assistance of Marty, Joanne and Jennifer from the Forest Service. Our scenic working conditions suddenly changed as the weather turned to occasional rain, hail, and even snow! Back at camp large puddles under several of our tents prompted a popular decision to move to a lodge for a couple of nights. The new transects, 15 meters long, were laid perpendicular across trails in representative locations within *L. greenmanii* populations we had mapped earlier. We measured and recorded plant location, size, number of umbels, and percent cover in 20 x 50 cm Daubenmire plots. Our final task was to photograph all transects and carefully record their location and orientation. The goal was to ensure that future teams could locate the exact locations in subsequent years and measure changes in population numbers and individual plant size, especially in relation to distance from trails.

Although results from this study will be compiled later, some trampling impacts on *L. greenmanii* were obvious. A 1988 photograph of one transect showed several *L. greenmanii* plants and scattered large rocks in one section which is now bare soil where a new "trail" had begun. Some visitor management steps have already been taken to protect *L. greenmanii* from excessive disturbance, such as the recent addition of a weekend Forest Service interpreter to guide tours and supervise visitors on the trails. Physical trail barriers like rocks, designated view locations, and better trail signs describing *L. greenmanii* and other fragile alpine taxa were discussed as means of possible future protection for the local ecosystem. I am happy to report that there is still a large population of *L. greenmanii* on top of Mt. Howard and the ODA/Forest Service project is helping to protect it.

I found this internship to be an extremely valuable experience as I continue my training as a biology student at Oregon State University. Special thanks go to the Native Plant Society of Oregon, Bob Meinke and Tom Kaye of the ODA Plant Conservation Biology Program, the U.S. Forest Service, and the excellent botany program at Lane Community College which helped prepare me for this assignment.

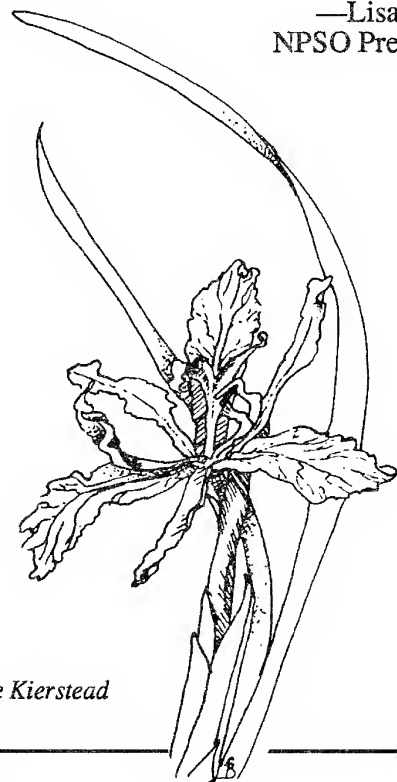
—Ed Hoover
Oregon State University

PRESIDENT'S CORNER

I am pleased and honored to be serving as the President of the Native Plant Society of Oregon. We are the constituency for all the native plants of Oregon be they rare or common. We serve a very important role in being the advocate for native plants and ecosystems in the state and we need to communicate our message to all levels of decision makers, from those at the national level in Washington D.C. to those at the local level in our state, county and neighborhood. This is a critical time for our voices to be heard. I feel we need to let others know the value of these plants and the importance of protecting their habitat and those processes that create and renew habitat. Written contact with the appropriate decision makers is especially important. Those of us that live near or spend time on public lands need to be involved in management decisions that affect those lands.

Native Plant Society members are ideal "key contacts" or "stakeholders" when input is necessary for decisions that have an effect on our native ecosystems. This is an exciting time when we consider the potential impact of a group as large as the Native Plant Society of Oregon. I look forward to meeting and working with you. Please feel free to share your ideas, comments and criticisms with me.

—Lisa Croft
NPSO President



Iris tenax
drawn by Julie Kierstead

HECTIC DAY FOR EMERALD R & E CHAIR

8:01am, Tuesday Sept 1. Phone jangling. Heavy equipment operator on line. Been ordered to bulldoze *Lomatium bradshawii* at Short Mt. Listed federally endangered. Two acres designated wetland diked and graded.

8:05am. Pull rap sheet—long as arm. Lane County owned and operated landfill. Sited on Bashaw clay wetland. No EA or EIS. FOIA from Corps: no permits issued. Floodwaters lap at base. Bad leachate breakout 1991. DEQ monitoring wells under water. Leachate ponds sited in Camas Swale creekbed. Raw leachate sprayed on lomatiums last year. City of Corvallis drinking water. Coffee getting cold.

8:09am. Outgoing enforcement calls. Laura Todd; USFWS rare plants. Jeff Kent; prosecutor, US Attorneys Office. Norm Delorne; natural resource / ecoterrorism special agent, FBI. Larry Keene, FWS Enforcement Agent, Seattle. Ken Bierly; Division of State Lands Wetlands Director. Brian Lightcap; US Army Corps of Engineers, Clean Water Act Enforcement Officer. Audrey Eldridge; DEQ Compliance Officer. Help on its way.

8:23am. Reheat coffee. Outgoing calls to resource specialists. Bob Meinke: ODA rare plant program. Jimmy Kagan; Oregon Natural Heritage Program. Bill Castillo; ODFW District biologist. Laura Bernstein; USFS Fisheries Biologist.

8:35am. Review resource data. Crucial southern anchor in new recovery plan for Bradshaw's lomatium. ONRC lawsuit filed August 10th. *Aster curtus*, *Erigeron decumbens* nearby.

Western pond turtle juveniles. Bald eagle nest downstream. Oregon chub in Camas Swale.

8:49am. Outgoing calls to interest groups. Bruce Newhouse; NPSO Chapter President. Peggy Robinson; Sierra Club Many Rivers Group. Dan Stotter; environmental attorney, Friends of the Coast Fork.

8:59am. Outgoing calls to media. Harry Esteve (Register-Guard). Kathleen Monje (The Oregonian). Pauline Austin (KVAL). Channel 13. OPB. KNPR.

9:21am. Make pancake batter. Turn on stove.

9:22am. Incoming call, line 1. Turn stove off.

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4:59pm. Last TV crew gone from house. Take last phone call. Prep last of 16 fax packets. Make fresh pancake batter. Turn stove on.

5:01pm. Equipment operator again. Harassed by supervisor. Advise to hire attorney, threaten County with whistleblower suit. Spouse already did.

—Tom Pringle
Emerald Chapter

POTENTIAL THREAT TO US PRICKLY PEARS

The following article is from Park Science, Summer 1992. If anyone finds this insect, send us a report.

Cactoblastis cactorum is a phycitine moth that has been used with remarkable success as a biological control agent against prickly pear cacti, *Opuntia* spp., in Australia, the Caribbean, Hawaii, India and South America. Solid stands of prickly pears have been reduced to a few stragglers in all these areas within a very short time. The moth whose larvae feed within the cladode (pad) often is cited as one of the best examples of effective biological control.

The moth was introduced to the Caribbean in 1957 to control the prickly pear on Nevis. Later it was taken to other islands but also dispersed naturally to areas such as Puerto Rico. Recently it was found in the Florida Keys and since has spread as far north as Key Biscayne.

There are many species of *Opuntia* in North America, where they form an important element of the flora of certain ecosystems, e.g., deserts. Some of these species now are quite rare. They already are attacked by native phytophagous insects. The introduction of *Cactoblastis*, however is a very serious threat to the genus. Pesticides are only effective during the period when the larvae are penetrating the pads. Thereafter they are generally protected by the thick outer cuticle of the pad. A number of natural enemies of *Cactoblastis* are known, but their efficacy and host specificity need evaluation. It is unlikely that such a study will occur unless considerable pressure is brought to bear on state and federal agencies.

More detailed information can be had from Drs. D.H. Habeck and F.D. Bennett, Dept. of Entomology and Nematology, IFAS, Univ. of Florida, Gainesville 32511. Ask for Entomology Circular 333 – *Cactoblastis cactorum* Berg (Lepidoptera: Pyralidae), a Phycitine New to Florida.

Clifford Smith and Donald Gardner
NPS / CPSU, University of Hawaii

FALL T & E PLANT CONFERENCE

It's an even numbered year, so we are again planning a Rare and Endangered Plant Conference. The conference will be sponsored by University of Oregon Herbarium, Native Plant Society of Oregon, Oregon Department of Agriculture, Oregon Natural Heritage Program, as well as by the Forest Service and Bureau of Land Management, under the Interagency Rare Plant Committee.

We again plan to have the conference in Eugene. This will probably be our last conference there, since the Herbarium will be closing. After this year we plan on holding conferences and reprinting the booklet Rare, Threatened and Endangered Plants and Animals of Oregon every third year, instead of every other year. The conference is scheduled for the weekend of November 7th & 8th. This year we plan to entirely review the T & E lists on Saturday, November 7th. In order to get through the lists in one day, we are requesting that all interested parties propose all changes in advance. Send proposed changes to:

Sue Vrilakas
Oregon Natural Heritage Program
1205 NW 25th Avenue
Portland OR 97210

All we need is the name of the species, the proposed change, and a very brief explanation, as well as your name. Nothing formal is required, and neat handwriting is fine. In order to be able to collate and circulate these proposed additions, deletions and status changes, we would like these be received at our office by October 1st. Since you will be reading this around October 1st, we would like the changes ASAP. We will send out the list of proposed changes on October 20th to everyone who sends in recommendations for change, or who sends us a stamped, self-addressed envelope. This way we can limit our discussions at the conference to changes for which there is some disagreement.

The Forest Service and the BLM may use this opportunity to provide some workshops for Botany training on the Thursday and Friday before the meeting. Depending on the wishes of NPSO members and the Board, we may or may not continue the meetings on Sunday, November 8th.

BLM REQUESTS INPUT ON WESTERN OREGON MANAGEMENT PLANS

The US Bureau of Land Management (BLM) has released draft Resource Management Plans (RMP) combined with an Environmental Impact Statements (EIS) for each of its six of its Western Oregon Districts. The six documents embody BLM's preferred alternative for each District. The plans are intended to be in force guiding BLM land management approaches for at least ten years.

The RMP's are monuments to the evolving awareness of a major governmental agency in respect to its stewardship over much of the public lands of our state. Publicity from the BLM touts its newly developed information-gathering and analysing abilities, which include GIS mapping, a greater awareness of the importance of ecosystem health to all forest uses, and the increased presence of and input from staff botanists and other experts. The practices of the BLM have in the past been widely criticized by the environmentalist community; and interest in the management shifts embraced in these draft RMP / EIS documents will be high. The BLM considers the changes included in these documents represent the most significant management changes yet for them.

The BLM is asking the public in general and NPSO members in particular to comment on these RMP's. There is a 90 day period to send in your comments. Be sure to ask for copies of the RMP from districts you are interested in, and send in your comments! Below are the addresses of the six Western Oregon BLM District offices:

Coos Bay—1300 Airport Lane, North Bend OR 97459; 756-0100.

Eugene—PO Box 10226 (2890 Chad Drive), Eugene OR 97440; 683-6600.

Lakeview—PO Box 151 (1000 9th Street S.), Lakeview OR 97630; 947-2177.

Medford—3040 Biddle Road, Medford OR 97504; 770-2200.

Roseburg—777 NW Garden Valley Blvd., Roseburg, OR 97470; 672-4491.

Salem—1717 Fabry Road, SE, Salem OR 97306; 375-5646.

BITS AND PIECES

---NEWS AND INFORMATION FROM ALL OVER

EXPANDED MT. PISGAH ARBORETUM FALL FESTIVAL AND MUSHROOM SHOW

Mount Pisgah Arboretum's 11th Annual Fall Festival and Mushroom Show will be held on November 1st, 1992 at the Mount Pisgah Arboretum, from 10 am to 4 pm.

An expanded variety of activities will enrich attendees of all ages. Featured again this year is the Scarecrow Contest with prizes awarded for originality and humor. Creative participants enter whimsical and humorous scarecrows which will grace the paths. Enter as a team or by yourself. Call the Arboretum at 747-3817 for entry info.

Fans of fungi should find our local mushroom experts, Freeman Rowe and Marcia Peeters, who will help identify the mushrooms you find and bring in.

For children we'll have guided arts and crafts activities, microscopes for viewing common nature subjects with different eyes, and puppet shows to entertain and educate. A Touch Table will be offered encouraging all ages to hold and feel some of the natural objects found at the Arboretum.

Other activities will include the sale of native and commercial plants, dried flowers and wildflower seeds, demonstrations featuring Northwest mushroom products as well as participation by commercial dealers in wild mushrooms and related products.

Expert trail guides will conduct nature walks at frequent intervals to allow visitors an opportunity to learn more about the Arboretum and its flora and fauna. Be prepared to enjoy our hot and delicious food items, including home-baked goods and fresh-pressed cider

Live entertainment includes Balladina, a Balkan folk music group; Johnny Schiller and Michael, a local fiddle and accordion duo; and Mark Curry and Allan Phillips playing jazz.

Mount Pisgah Arboretum is off Seavey Loop Road on the Coast Fork of the Willamette six miles SE of Eugene. Follow the signs from the I-5 overpass past Lane Community College on 30th.

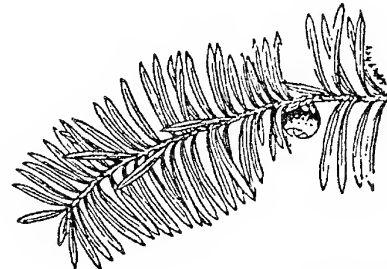
THE WETLANDS CONSERVANCY'S ANNUAL WETLANDS CONFERENCE

Wetland areas, wetlands regulations and their enforcement, mitigation banking and the role of land trusts, set against the backdrop of the presidential election, will be the focus of The Wetlands Conservancy's annual seminar on Saturday, Nov. 21st, at Portland State University. It is slated to run from 9 am to 3 pm.

The conference will start with discussions of the values, nature and human use of wetlands in the different zones of Oregon. Talks will proceed to the subjects of wetlands regulations, enforcement, status of the Federal wetlands delineation manual, wetland mitigation banking, and private efforts to preserve our shrinking wetlands resources. The conclusion will be a panel discussion on the wetlands protection debate nationally and locally.

"This will be a unique opportunity to listen to and discuss Oregon wetland issues with interesting and knowledgeable experts", said TWC Executive Director Tony Laska. "Different points of view will add a dimension to everyone's understanding. Speakers will be drawn from Oregon governmental agencies, land trusts, education communities, and development communities.

To receive a registration form, write TWC at PO Box 1195, Tualatin OR 97062, or call 691-1394. Registration fee will be \$15 prior to Nov. 10th and \$20 thereafter or at the door. Students can register for \$7.50 including a complementary TWC membership.



Taxus brevifolia

Western Yew

Drawing from

Trees: Yearbook of Agriculture 1949

STATE OFFICERS

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GUIDELINES FOR CONTRIBUTORS

The NPSO *Bulletin* is published monthly as a service to NPSO members and the public. Contributions of all types are welcome.

DEADLINE: Copy is due with the editor by the 10th of each month. Submissions can be in any form. Author's name & affiliation are at the end of the article. Double space between paragraphs. For special materials (e.g., plant keys) choose an appropriate format, keeping in mind that readers may wish to carry your article pasted inside their favorite field guide. Formatting assistance is available from your editor. All *Bulletin* articles now go into the new NPSO database via computer. Camera-ready copy is not used, with rare exceptions.

Computer output: The editor prefers articles submitted on Macintosh or IBM disks, or via modem. Contact the editor for details.

Illustrations: Line drawings, prints, and high contrast B&W prints are useable. Some Macintosh graphics can be used also. Contact the editor about our current needs, or send them along with your article.

Credits: If the item is not original, name and date the source. For original items, identify the author and indicate, for news items, if a by-line is desired. Indicate whether the item is to be used in its entirety or excerpted at the editor's discretion.

Scientific Names: Nomenclature should follow *Flora of the Pacific Northwest*, by Hitchcock et al., when appropriate. Use both scientific and common names if possible. *Italicize* genus and species, or underline.

Return of Originals: Submissions are not returned unless requested.

Membership in the Native Plant Society of Oregon is open to all.

Membership applications, renewals, and changes of address (include old address and zip code) should be sent to the Membership Chair.

NATIVE PLANT SOCIETY OF OREGON MEMBERSHIP FORM

Name _____

Chapter (if known) _____

Address _____

Is this a change of address?

If so, please write your *Old Address* here: _____

City _____ State _____ Zip+4 _____

Phone (Home) _____ (Work) _____

City _____ State _____ Zip _____

* **DUES** include monthly NPSO *Bulletin*. Full membership is for a calendar year, January through December. New memberships enrolled during September through December are charged a reduced "Quarter Membership" rate.

() New	() Renewal	() Quarter Membership (Sep.-Dec.)	\$3.00	() <i>Bulletin</i> Subscription only	\$12.00
() Student.....			\$ 8.00	() Sustaining.....	\$ 30.00
() Regular.....			12.00	() Patron.....	100.00
() Family Membership.....			18.00	() Life Member	500.00

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Leighton Ho Memorial Award Fund. \$ _____
 Rare and Endangered Plant Fund. \$ _____

* All contributions to the Native Plant Society of Oregon, a non-profit organization, are tax deductible. Please make checks for dues and contributions payable to NATIVE PLANT SOCIETY OF OREGON. Send completed form and full remittance to:

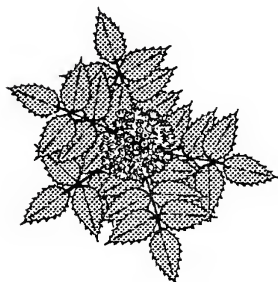
Jan Dobak, NPSO Membership Chair, 2584 NW Savier St., Portland OR 97210-2412.

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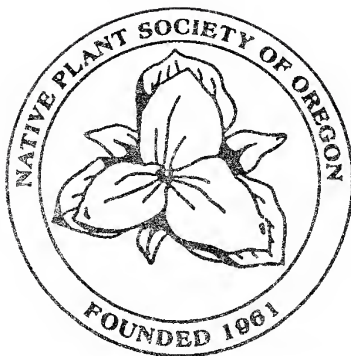
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Send change of address notices
and membership requests to:
Native Plant Society of Oregon
Jan Dobak, Membership Chair,
2584 NW Savier St.,
Portland, Oregon 97210-2412

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Bulletin of the
**NATIVE PLANT SOCIETY
OF OREGON**

Dedicated to the enjoyment, conservation, and study
of Oregon's native vegetation

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Native Plant Society of Oregon PO Box 902, Eugene OR 97402

Membership inquiries: Jan Dobak, Membership, 2584 NW Savier St., Portland OR 97210-2412
For more society information, see the inside back cover.

IMPORTANT NOTE TO FIELD TRIP PARTICIPANTS:

Field trips take place rain or shine, so proper dress and footwear are essential. Trips may be strenuous and/or hazardous. Please contact the trip leader for information about difficulty, mileage, and terrain. Participation is at your own risk. Bring water and lunch. All NPSO activities are open to the public at no charge (other than carpool mileage), and friends, newcomers and visitors are always welcome.

Notice to field trip chairs and leaders: The Forest Service and other Federal agencies have set policies limiting group size in wilderness areas to 12. The reason for this is to limit the human impact on these fragile areas. Each group using wilderness must be no larger than 12.

CHAPTER NEWS

Blue Mountain



For information, call Jerry Baker (566-2244).

Corvallis

14 Dec., Mon.

MEETING. NEW LOCATION: Unitarian Fellowship at 2945 NW Circle Blvd. Corvallis. At 7 pm there will be a conservation issues meeting. At 7:30 pm Manuela Huso will talk on purple loosestrife in Oregon and its biological control. Call Esther McEvoy for information (754-0893).

Emerald

9 Nov., Mon.

MEETING. Tom Kaye on Monitoring Lane County's federally listed rarities: Bradshaw's lomatium and tall bugbane. Slide show & panel with Jennifer Dimling and Nancy Wogan, local USFS & BLM botanists. 7 pm at Morse Ranch Park. From downtown Eugene, take Willamette St. S. to Crest Dr. (Rt. thru. "Y" for Donald, between 32 & 33rd. Ave. E.). Turn right (W.) on Crest and proceed about 4 blocks. Turn right into Wayne Morse Ranch Park parking lot. Walk east to the white farmhouse.

14 Dec., Mon.

MEETING. Our Annual Member's Slide Show. Bring your ten recent best slides and some snacks to 1575 Washington, Eugene. Refreshments provided.

EMERALD CHAPTER MEETINGS in 1993 will be rescheduled beginning in January to the fourth Monday at 7 pm, still at the Morse Ranch.

High Desert

24 Nov., Tues

MEETING: 7:30 pm at the Central Oregon Environmental Center, 16 NW Kansas, Bend. Share your wildflower favorites! Slide show round robin. Bring a dozen of your summer slides to share with others of the Chapter.

Mid-Columbia

4 Nov., Wed.

MEETING: 7:30 pm at the Mosier School. Tom Kaye of the Corvallis NPSO Chapter will present the program "Ethics and Issues of Reintroducing of Rare Plants."

North Coast

7 Nov., Sat.

FIELD TRIP: Mushrooming trip to the County Park at Air Base, led by Daylen Jones. Leave from PUD at 10 am. For more information call Jaylen JHones (842-7710).

24 Nov., Tues.

MEETING: 7 pm at the Carl Rawe Meeting Room in the Tillamook PUD, 1115 Pacific, Tillamook. Jaylen Jones will present a program on mushroom identification. Call Jim Winslow (842-2246) for more information.

Portland

10 Nov., Tues.

MEETING: 7 pm at the First United Methodist Church, 1838 SW Jefferson St, Portland. Mike Fahey will give a slide presentation on the seeds of wildflowers and their seed dispersal mechanisms.

Siskiyou

19 Nov., Thurs.

MEETING: 7:30 pm in Room 171, Science Building, Southern Oregon State College. Wayne Rolle, Botanist for the Rogue River National Forest, will present a program on "Native Grasses for Erosion, Forage and Restoration Projects". He will discuss a pilot project in progress on the Rouge Forest. For information call Linda Knight (488-3508).

South Coast

For information on the pending formation of this chapter, contact Bruce Rittenhouse (888-9328).

Umpqua Valley

* * * * *

For information, call Ted Shattenkerk 679-6953).

Willamette Valley

16 Nov., Mon.

MEETING: 7 pm in Room 225 of the First United Methodist Church at 600 State Street (corner of Church & State), Salem. Mike Fahey will present a program on "Flowers and Seeds of the Columbia Gorge".

21 Nov., Sat.

WORKSHOP: Bruce McCune, professor of botany at Oregon State University, will lead a Lichen Workshop at Silver Falls State Park. Meet at 9 am at the cabin behind the Main Lodge Building in the Park.

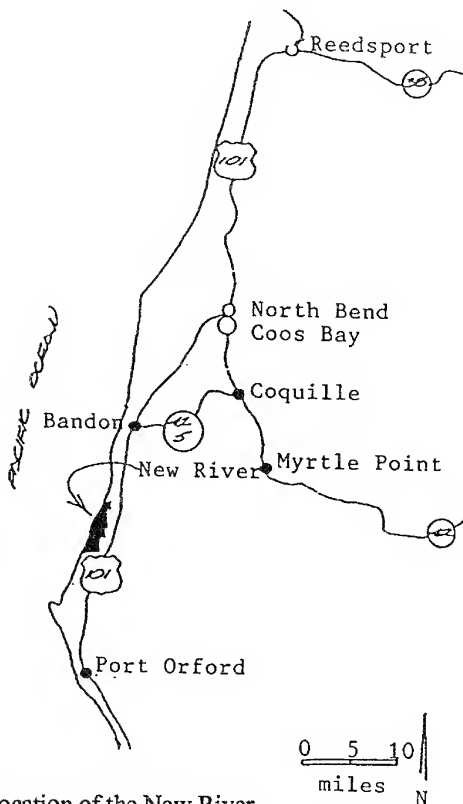
William Cusick

* * * * *

For information, call Bob Ottersburg (963-4907).

SIGNIFICANT PLANTS OF NEW RIVER

New River is located along the southern Oregon Coast between Bandon and Port Orford (Fig 1). This area has been designated as an Area of Critical Environmental Concern (ACEC) since 1983, and is managed by the Bureau of Land Management, Coos Bay District. The area was designated an ACEC because it supports a unique mix of wildlife, fisheries, botanical, and cultural resources. New River supports runs of chinook and steelhead salmon, the foredune provides nesting habitat for western snowy plovers, and adjacent pastures and meadows provide resting habitat for the Aleutian Canada Goose. Bald eagles and peregrine falcons have also been observed. The ACEC and adjacent private land supports populations of eight different special status plant species, some unique plant communities and other taxonomically interesting plant species which will be described in this article.



Location of the New River
Area of Critical Environmental concern
in Southwestern Oregon

New River is unlike any other river in Oregon. The river itself appears to be less than 100 years old. New River officially begins at the outlet from Floras Lake. Here the river parallels the Pacific Ocean and is separated from it by a foredune and sand spit. The river is very unstable and its mouth continues to move north. It is thought that the stabilization of the foredune resulted from introduction of European beach grass (*Ammophila arenaria*) earlier this century, thus forming New River.

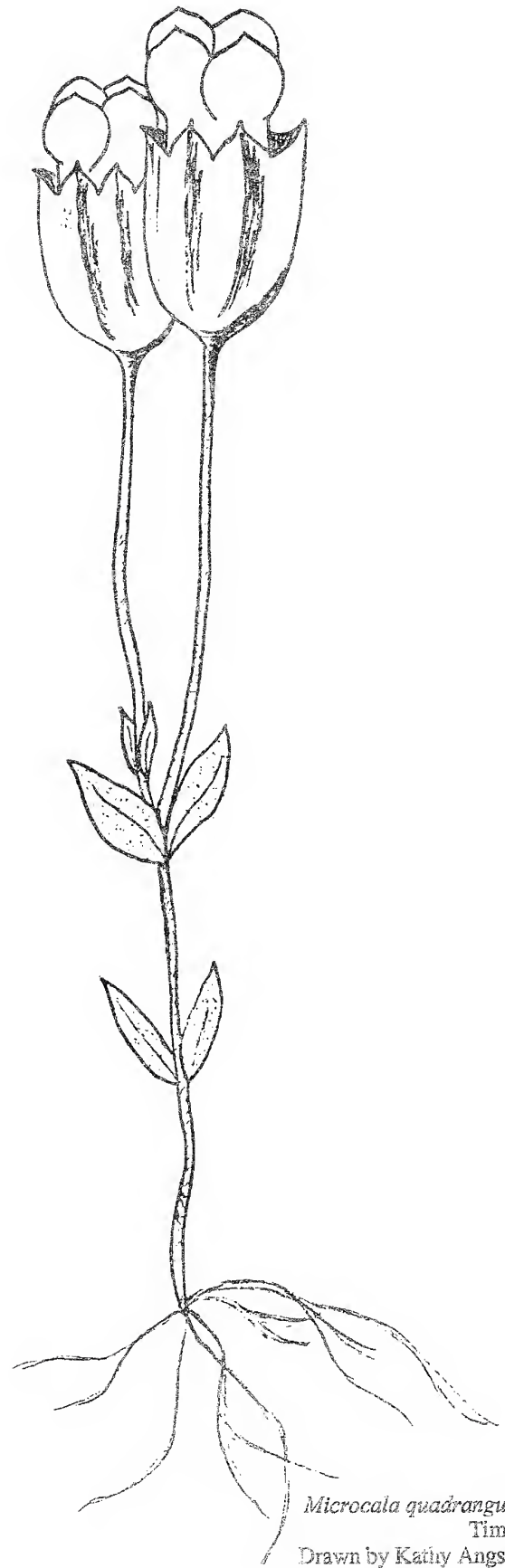
Five different plant communities occur within the ACEC. These are; 1) foredune / open sand, 2) deflation plain, 3) open meadows, 4) upland shrub and forest, and 5) bogs/ wetlands. The foredune occurs between the ocean and river and is dominated by European beach grass with areas of open sand. A large open dune is also located north of Fourmile Creek. Species present on these dunes include yellow sand-verbena (*Abronia latifolia*), American dune grass (*Elymus mollis*), seashore bluegrass (*Poa macrantha*), sandmat (*Cardionema ramosissima*), beach fleabane (*Erigeron glaucus*), dune tansy (*Tanacetum douglasii*), sea-thrift (*Armeria maritima*), seashore lupine (*Lupinus littoralis*), silverburweed (*Franseria chamissonis*), glehnia (*Glehnia leiocarpa*), sea rocket (*Cakile edentula*), purple cudweed (*Gnaphalium purpureum*), cotton-batting plant (*G. chilense*), beach-aster (*Corethrogyne californica* var. *obovata*), beach evening-primrose (*Camissonia chieranthifolia*), cream cups (*Platystemon californicus*), beach morning glory (*Convolvulus soldanella*), and the federal candidate silvery phacelia (*Phacelia argentea*).

Directly behind the foredune is the old deflation plain and New River. Species observed within the deflation plain include timwort (*Microcala quadrangularis*), bractless hedge-hyssop (*Gratiola ebracteata*), brass-buttons (*Cotula coronopifolia*), paintbrush owl-clover (*Castilleja ambigua*), chaffweed (*Centunculus minimus*), and many species of *Carex* and *Juncus*. The populations of timwort (Oregon Natural Heritage Plant List 2) at New River appear to be the only known populations along the coast.

As one increases in elevation the upland shrub and forest community begins to dominate. Intermixed with the shrub / forest community are communities in open meadows and bogs. Woody vegetation present include Hooker willow (*Salix hookeriana*), Sitka spruce (*Picea sitchensis*), shore pine (*Pinus contorta* var. *contorta*), Port. Orford cedar (*Chamaecyparis lawsoniana*), Douglas-fir (*Pseudotsuga menziesii* var. *menziesii*), western hemlock (*Tsuga heterophylla*), silk tassel (*Garrya elliptica*), cascara (*Rhamnus purshiana*), salal (*Gaultheria shallon*), Pacific wax myrtle (*Myrica californica*), hairy manzanita (*Arctostaphylos columbiana*), red flowering currant (*Ribes sanguineum*), evergreen huckleberry (*Vaccinium ovatum*), and western rhododendron (*Rhododendron macrophyllum*). Forbs present in this habitat are western starflower (*Trientalis latifolia*), redwoods violet (*Viola sempervirens*), rattlesnake plantain (*Goodyera oblongifolia*), and the beautiful tiger lily (*Lilium columbianum*).

Species present in the meadows include the special status dwarf brodiaea (*Tritelia terrestris*), tufted hairgrass (*Deschampsia cespitosa*), seaside lotus (*Lotus formosissimus*), grass-widows (*Olsynium douglasii*), death-camas (*Zigadenus fremontii*), dwarf owl-clover (*Triphysaria pusilla*), butter-and-eggs (*Triphysaria eriantha* = *Orthocarpus erianthus* var. *gratiosus*), capitate gilia (*Ipomopsis congesta*), coast strawberry (*Fragaria chiloensis*), beach sanicle (*Sanicula arctopoides*), California oat-grass (*Danthonia californica*), cats-ear (*Calochortus tolmiei*), Pacific paintbrush (*Castilleja littoralis*), and Greenes bog-orchid (*Habenaria greenei*).

Also present in the ACEC are some wetlands which include coastal bogs. These habitats include the insectivorous California pitcher-plant (*Darlingtonia californica*) and round leaved sundew (*Drosera rotundifolia*). Other species include sticky tofieldia (*Tofieldia glutinosa* ssp. *glutinosa*), small white violet (*Viola macloskeyii* ssp. *pallens*), lance-leaved violet (*Viola lanceolata* ssp. *lanceolata*), bog clubmoss (*Lycopodium inundatum*), northern starflower (*Trientalis arctica*), yellow-eyed-grass (*Sisyrinchium californicum*), dulichium (*Dulichium arundinaceum*), bog loosestrife (*Lysimachia terrestris*), cranberry (*Vaccinium macrocarpon*), buckbean (*Menyanthes trifoliata*),



Microcala quadrangularis
Timwort
Drawn by Kathy Angstrom
Coos Bay BLM

cotton-grass (*Eriophorum chamissonis*), deer fern (*Blechnum spicant*), and Labrador-tea (*Rhododendron neoglandulosum*). A couple of the bogs appear to be excellent habitat for the state endangered western lily (*Lilium occidentale*) but unfortunately none have been located.

Some interesting taxonomic and ecological questions surfaced while conducting field surveys in 1992. The sticky tofieldia keyed out to ssp. *glutinosa* based on seed morphology. According to Dr. Ken Chambers (1991) this subspecies turns out to have a range from Alaska down to British Columbia (Vancouver Island), across Canada, east to the northeastern United States. These populations, along with some historical populations from Charleston may have been introduced with cranberry starts (cranberry bogs are adjacent to the ACEC and abandoned bogs occur within the ACEC) from the northeast. The other possibility is that these are relict populations from Alaska. Further investigations are needed to determine if these populations are native or naturalized.

The two species of violets posed similar questions. The small white violet keyed out to *V. macloskeyi* which according to Hitchcock (1973) occur in wet or boggy ground in mountains of much of North America. Munz and Keck (1959) gives an elevation range of 3,500–11,000 ft. The question that arose was, how was this plant growing along the coast? When keyed out in Russell (1955) with Dr. Chambers at OSU it turned out to be ssp. *pallens* based on the number of crenations along the leaf margin. Two collections of this subspecies have been made near the McKenzie Pass in Deschutes and Lane Counties and near Black Rock Lookout in Douglas County (Russell 1955). Again the question came up, how did this species of violet get here? Is it possible that this species was introduced and then naturalized here or is it a disjunct population of this wide ranging subspecies? Again further investigation is needed to determine the status of these populations.

The lance-leaf or bog violet also raised questions because *Viola lanceolata* ssp. *occidentalis* is a special status plant in Oregon. The difference between ssp. *lanceolata* and ssp. *occidentalis* is the ratio between leaf length and width. Subspecies *lanceolata* has leaves 3.5–15 or more times long-

er than broad while ssp. *occidentalis* leaves are 1.5–2.0 times as long as broad (Russell 1955). It is apparent that this subspecies has been introduced along with cranberry starts from the northeast and has since naturalized. A previous collection has been made from bogs near Bandon (Russell 1955).

It is interesting to note that this area appears to have a mixture of two floristic provinces. Some species such as beach-aster, dwarf brodiaea, cream cups, and butter-and-eggs are at the northern—most extent of their range, while species such as the northern starflower, sticky tofieldia, and buckbean may be relicts from the north. This diversity and unique mix of plant assemblages makes New River ACEC an interesting area botanically. Further field surveys will probably yield more interesting finds.

Currently, the Coos Bay District is developing a new management plan for this area. Some of the ideas being developed are to develop trails and informative pamphlets on the plants (and animals) of the area. Wildflower walks will be scheduled in the upcoming years. For information or directions to New River contact Bruce Rittenhouse, Coos Bay District Botanist, at (503) 756-0100. No camping is allowed on the ACEC, but many campgrounds are in the area.

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- Chambers, K.L. 1991. The puzzle of the Tofieldias of Coos County. *Bulletin of the Native Plant Society of Oregon*. 24(2):15-16.
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- Munz, P.A. and D.D. Keck. 1959. *A California Flora*. University of California Press, Berkeley.
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—Bruce Rittenhouse
District Botanist,
Coos Bay BLM.

THE PLANT PUZZLE

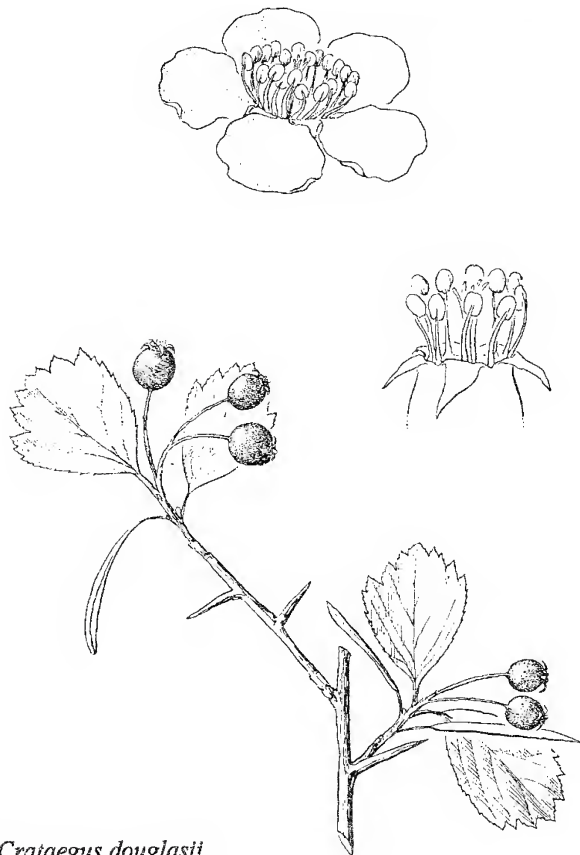
Give the scientific names of four herbaceous flowering plants, in different families, that are native to Oregon west of the Cascade Crest and Mexico's Baja Peninsula. An example is the sedge *Carex rostrata*, which grows in the Sierra San Pedro Mártir, and in Oregon's Coast Range.

The first correct answer will win a prize.

Send your guess on a postcard to:

Peter Zika
4230 NW Clubhouse Place # 1
Corvallis OR 97330

The answer to the September puzzle was *Crataegus douglasii*, black hawthorn. The prize winner was David Kribbs of Philomath.



Crataegus douglasii
Douglas' hawthorn
Drawn by Jeanne R. Janish
from *Flora of the Pacific Northwest*

QUICK NOTES....

LOBELIA DORTMANNA REDISCOVERED!

A circumboreal aquatic previously believed to be extinct in Oregon, *Lobelia dortmanna* (water lobelia or water gladiol), has been rediscovered this field season by US Forest Service Botanist Kathleen Cooper. Thousands of plants were located along a shallow lakeshore, in gravel to depths of about one meter in water. The lake is about 5500 ft. elevation on the Sisters Ranger District of the Deschutes National Forest. The last known Oregon sighting—along the Metolius River in the early 1900s—has never been relocated.

—Cindi O'Neil
High Desert Chapter President

TEACHERS AS BOTANISTS / RESEARCH ASSISTANTS

The Oregon Wetlands Study is a scientist-education partnership between Portland State University (PSU) and the US Environmental Agency (EPA). Teachers, especially science teachers with interests in botany and wetlands, are being recruited to assist with field data collection while earning graduate course work credit. The Oregon Wetland Study is designed to compare restored and natural wetlands in similar settings. Data will be collected in the Portland metropolitan area during Summer 1993 (June 21st through August 15th); the required training course is offered during the 1993 spring term at PSU. Upon successful completion of the Summer fieldwork, each participating teacher will receive a stipend and six graduate science credits. Tuition costs will be waived.

For more information, please contact:

William G. Becker, Director
Northwest Institute for Science Education
Portland State University
Portland, Oregon
Phone: (503) 725-4266
FAX: (503) 725-3888

—Kate Dwire
NPSO Westside Conservation Chair

NPSO NOTECARDS AVAILABLE

Our notecards feature seven rare plants drawn by Julie Kierstead plus one created by Eugene artist Valerie Sloane. Printed on pastel parchment-style paper in beige, grey-blue and green with matching envelopes, these notecards make lovely gifts. The collector quality works include Gentner's fritillary (*Fritillaria gentneri*), Kamchatka lily (*Fritillaria camchatcensis*), red clintonia (*Clintonia andrewsiana*), Myrtle Creek mariposa (*Calochortus coxii*), Barrett's penstemon (*Penstemon barrettiae*), rough popcorn flower (*Plagiobothrys hirtus*), triplet lily (*Triteleia laxa*) and Gorge daisy (*Erigeron oregonus*).

Available through your local NPSO chapter; ask at meetings or see the Society Information page (p. 117) for the number of your chapter president. For more information contact Nancy Fredericks at PO Box 127, North Bonneville WA 98639 {(509) 427-8778}.

NPSO T-SHIRTS

How about a NPSO T-shirt?!! On hand are long sleeve (L & XL) with NPSO logo in blue, *Polypodium* in grey, Trillium in jade or *Viola glabella* in teal. These are available through your local chapter, or they can be ordered through Jenny Dimling at PO Box 902, Eugene OR 97440, or call in an order at (503) 343-3242. Deadline for ordering the the 20th of December.

NPSO WINDOW STICKERS

These decals feature our trillium logo in green on an opaque white background, made to go on the inside of your car or other windows. They can be ordered from the High Desert Chapter, c / o Stu Garrett, 21663 Paloma Drive, Bend OR 97701. Minimum order is 5.

Welcoming Our New Members...

Here's our new members from
August 2nd thru October 3rd:

Corvallis

David Kribs
Lynne Price

Emerald

Floyd Gotham
Phyllis F. Hart
Ed Hoover
Lauren Lezell
Bess & David Raible Melby
Jasmine Star
Phil Warner

High Desert

Darryl Ianni
Dr. Gregg Riegel

Mid-Columbia

Dale F. Rush

North Coast

Wayne L. Jackson
Betty L. Stone

Portland

Douglas D. Beebe
Lorri Harnes
Maya Muir
Murty Printing & Publishing
Jacquelyn Sauriol
Karen Wallace
Jeff Williams
Kermit Williams

Siskiyou

Tonia L. Moro

Willamette Valley

Tom Catrall
Harry M. Demaray
Max Erskine
Barbara A. Haytas
Mark Quistad
Don & Ruth Roberts

William Cusick

Susan Geer
Barbara Ashley Phillips
Penny Sabin

BITS AND PIECES

—NEWS AND INFORMATION FROM ALL OVER

SADDLE MOUNTAIN TRAILS RECONSTRUCTED

The three-mile trail to the 3,283 ft. summit of Saddle Mountain has been reconstructed by Oregon State Parks and Recreation. Years of winter storms and heavy use by hikers and wildlife made sections difficult and even dangerous to use. In addition, poor trail conditions encouraged off-trail hiking that lead to trampling of the native plants of the area. Some rare species exist there.

In 1990 boardwalks, bridges and other structures were installed. This past summer the upper half mile of the trail has seen the building of stairways, handrails and erosion control structures. The State Parks rehabilitation program budget was the source of the \$45,000 needed to fund the project. The 158th Army Reserve Unit from Everett, Washington assisted by airlifting supplies up the mountain, saving about \$8,000.

Saddle Mountain has always been a prime wildflower area. It holds relict populations of northern species which arrived during the Ice Age, and now are isolated on the peak. A few of its species next appear in the snowy Olympics in northern Washington.

The trailhead is in Saddle Mountain State Park, seven miles north of Hwy. 26 from a turnoff 10 miles east of Hwy. 101. Best wildflower displays occur in May and June.

A SENSE OF WONDER

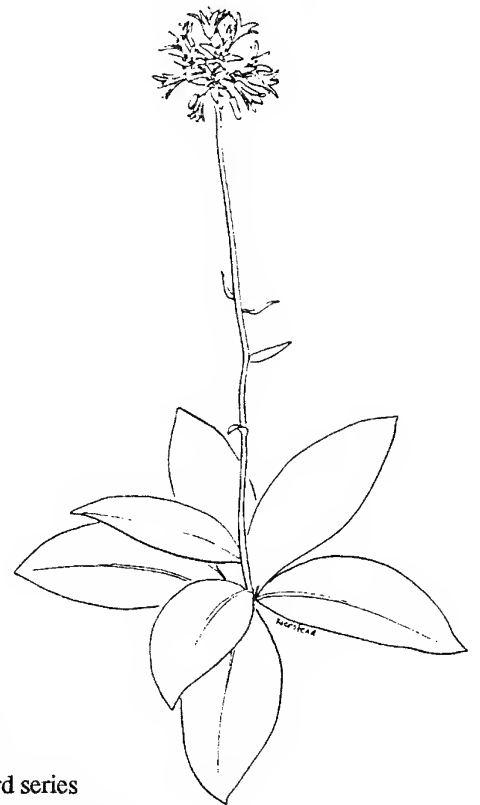
This two-act play, which is based on the life and works of Rachel Carson, is being offered free by the Northwest Coalition for Alternatives to Pesticides. Kaiulani Lee is the author of the play, and she will be on hand to perform it as well.

Date is November 7th, at 7:30 pm at the Edison School Cafetorium at 22nd and Onyx in Eugene. Call NCAP at (503) 344-5044 to reserve seats.

GENETICS AND CONSERVATION OF RARE PLANTS

This book, co-edited by Don Falk and Kent Holsinger, is a resource guide for the plant conservationist. With detailed information on current understanding of the genetics and population biology of rare plants, it relates this to practical recommendations for conservation measures. The book features discussions on distribution and significance of genetic variations, management and evaluation of rare plant germ plasm and conservation strategies to encourage genetic diversity. Case studies are included.

The book can be ordered through Oxford University Press (1-800-451-7556) or through your local bookstore.



Clintonia andrewsiana
Red clintonia
from the NPSO notecard series
Oregon Rare and Endangered Plants

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 KALMIOPSIS EDITOR Frank Lang..... 535 Taylor St., Ashland 97520; W-552-6341; H-482-5235

GUIDELINES FOR CONTRIBUTORS

The NPSO *Bulletin* is published monthly as a service to NPSO members and the public. Contributions of all types are welcome.

DEADLINE: Copy is due with the editor by the 10th of each month.

Submissions can be in any form. Author's name & affiliation are at the end of the article. Double space between paragraphs. For special materials (e.g., plant keys) choose an appropriate format, keeping in mind that readers may wish to carry your article pasted inside their favorite field guide. Formatting assistance is available from your editor. All *Bulletin* articles now go into the new NPSO database via computer. Camera-ready copy is not used, with rare exceptions.

Computer output: The editor prefers articles submitted on Macintosh or IBM disks, or via modem. Contact the editor for details.

Illustrations: Line drawings, prints, and high contrast B&W prints are useable. Some Macintosh graphics can be used also. Contact the editor about our current needs, or send them along with your article.

Credits: If the item is not original, name and date the source. For original items, identify the author and indicate, for news items, if a by-line is desired. Indicate whether the item is to be used in its entirety or excerpted at the editor's discretion.

Scientific Names: Nomenclature should follow *Flora of the Pacific Northwest*, by Hitchcock et al., when appropriate. Use both scientific and common names if possible. *Italicize* genus and species, or underline.

Return of Originals: Submissions are not returned unless requested.

Membership in the Native Plant Society of Oregon is open to all.

Membership applications, renewals, and changes of address (include old address and zip code) should be sent to the Membership Chair.

NATIVE PLANT SOCIETY OF OREGON MEMBERSHIP FORM

Name _____

Chapter (if known) _____

Address _____

Is this a change of address?

If so, please write your Old Address here: _____

City _____ State _____ Zip+4 _____ - _____

Phone (Home) _____ (Work) _____

City _____ State _____ Zip _____

* **DUES** include monthly NPSO *Bulletin*. Full membership is for a calendar year, January through December. New memberships enrolled during September through December are charged a reduced "Quarter Membership" rate.

() New	() Renewal	() Quarter Membership (Sep.-Dec.) \$3.00	() <i>Bulletin</i> Subscription only \$12.00
() Student.....	\$ 8.00	() Sustaining.....	\$ 30.00
() Regular.....	12.00	() Patron.....	100.00
() Family Membership.....	18.00	() Life Member	500.00

* CONTRIBUTIONS:

Leighton Ho Memorial Award Fund. \$ _____
 Rare and Endangered Plant Fund. \$ _____

* All contributions to the Native Plant Society of Oregon, a non-profit organization, are tax deductible. Please make checks for dues and contributions payable to NATIVE PLANT SOCIETY OF OREGON. Send completed form and full remittance to:

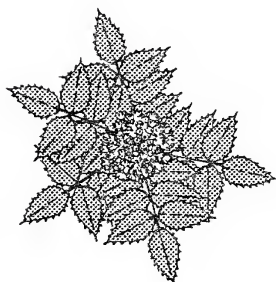
Jan Dobak, NPSO Membership Chair, 2584 NW Savier St., Portland OR 97210-2412.

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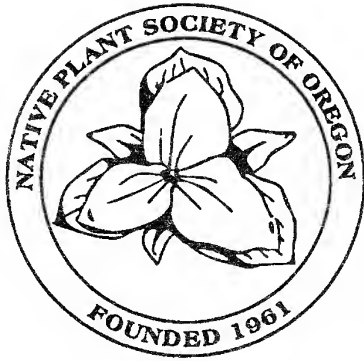
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Send change of address notices
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Native Plant Society of Oregon
Jan Dobak, Membership Chair,
2584 NW Savier St.,
Portland, Oregon 97210-2412

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NATIVE PLANT SOCIETY OF OREGON

Dedicated to the enjoyment, conservation, and study
of Oregon's native vegetation

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Native Plant Society of Oregon PO Box 902, Eugene OR 97402

Membership inquiries: Jan Dobak, Membership, 2584 NW Savier St., Portland OR 97210-2412

For more society information, see the inside back cover.

IMPORTANT NOTE TO FIELD TRIP PARTICIPANTS:

Field trips take place rain or shine, so proper dress and footwear are essential. Trips may be strenuous and/or hazardous. Please contact the trip leader for information about difficulty, mileage, and terrain. Participation is at your own risk. Bring water and lunch. All NPSO activities are open to the public at no charge (other than carpool mileage), and friends, newcomers and visitors are always welcome.

Notice to field trip chairs and leaders: The Forest Service and other Federal agencies have set policies limiting group size in wilderness areas to 12. The reason for this is to limit the human impact on these fragile areas. Each group using wilderness must be no larger than 12.

ITS RENEWAL TIME!

The NPSO membership year is January to December. Now is the time for members to renew.

But first....check your address label on the *Bulletin*. You might already be paid for 1993. If there is a 92 on the top line, you need to renew now.

A remittance envelope is in this issue of the *Bulletin*. Or use the membership form on the inside back page.

NPSO brings you field trips, programs, classes, the monthly *Bulletin*, and the annual *Kalmiopsis*.

This is also a good time to consider a tax-deductable contribution to our special funds. The Leighton Ho Memorial Fund is used for summer research projects in western Oregon, and is a matching grant in cooperation with The Nature Conservancy. The Rare and Endangered Plant Fund supports work with our most threatened plants. Contributions can also be made to the NPSO General Fund.

Your membership and donations make it possible to carry out more of the many projects that are needed to pursue the goals of NPSO.

MEMBERSHIP DIRECTORY TO BE PUBLISHED

The 1993 edition of the NPSO Membership Directory will be published in April. Anyone who wishes to receive a copy should add one dollar to their renewal payment.

If you wish to have your address or telephone number or both withheld from publication in the Directory, please make a prominent note on your renewal form.

STATE NEWS

9 Jan., Sat.

STATE BOARD MEETING: at Leach Botanical Garden, 6704 SE 122nd Avenue, Portland. Hosted by the Portland Chapter. Directions: from I-84 take the 122nd Street exit and drive south to the garden. From I-205 take Foster Road exit and drive east to 122nd and turn right onto 122nd. Go 1/4 mile to Leach Garden parking lot, which is across the Johnson Creek Bridge. All members are invited.

CHAPTER NEWS

Blue Mountain

For information, call Jerry Baker (566-2244).

Corvallis

14 Dec., Mon.

MEETING. Unitarian Fellowship at 2945 NW Circle Blvd. Corvallis. December is our annual Members' Slide Show, so bring 12 of your favorite slides and a dessert to share. Call Keli Kuykendall for more information (758-8409).

Emerald

14 Dec., Mon.

MEETING. Our Annual Members' Slide Show. Bring your ten recent best slides and some snacks to 1575 Washington, Eugene. Refreshments provided. **CORRECTION TO NOV. ANNOUNCEMENT:** we'll vote on which Monday to hold our meetings in 1993 (hopefully both to avoid conflicts with Corvallis Chapter, and still 7 pm. at Morse Ranch!) beginning in January.

12 Dec., Sat.

FIELD TRIP: "Plants with Hidden Marriage" Dr. David Wagner on Oregon cryptogams (his element!). 10 am at Mt. Pisgah Arboretum Nature Center. \$2 donation to Mt. Pisgah Arboretum (30th exit off I-5, east; follow signs). Bring your hand lens for fun with mosses, liverworts and ferns.

13 Dec. Sun.

HABITAT REHABILITATION FESTIVAL AND IVY FEAST: 2 - 4 pm. Meet at north end of Autzen Foot Bridge, East Alton Baker Park, Eugene. Bring gloves and clippers, rain or shine. For information call Dave Wagner, 356-3033.

19 Dec., Sat.

FIELD TRIP: Twig keying and Identification at Buford Park / Mt. Pisgah Arboretum with Dr. Rhoda Love. 10 am to noon at the Nature Center. Cosponsored by Mt. Pisgah Arboretum. Bring your hand lens and a pocket knife or hand pruners.

High Desert

For information, call Cindi O'Neil (389-3085)

Mid-Columbia

2 Dec., Wed.

MEETING: 7:30 pm at the Mosier School. Keith Chamberlain, Mid-Columbia Chapter President, will present "Some Interesting or Little Known Plants From Oregon and Washington". If you still have seeds for our project at the Mosier Interchange, bring them to the meeting.

6 Jan., Wed.

MEETING: 7:30 pm at the Mosier School. Jerry Igo, Mid-Columbia member will present "Showy Wildflowers of Oregon", a new video especially suited for cold winter nights.

North Coast

5 Dec., Sat.

POTLUCK MEETING: 11 am at Betty Stone's, 6800 5th Street, NW, Cape Meares. Bring salad, hot dish or dessert and own service. Also, people may bring binoculars for possible birding trip to Bay Ocean Spit. Call Betty (842-4350) or Jim Winslow (842-2246) for more information.

Portland

8 Dec., Tues.

MEETING: 7 pm at the First United Methodist Church, 1838 SW Jefferson St, Portland. Berta Youtie, Northeast Oregon Stewardship Ecologist for The Nature Conservancy, will present a slide show and program on TNC preserves in northeast Oregon.

Siskiyou

17 Dec., Thurs.

MEETING: 7:30 pm in Room 171, Science Building, Southern Oregon State College. Don and Molly Skillman will present a synchronized slide show of wildflowers and scenery observed on their 1700-mile hike from Mexico to Ashland along the Pacific Crest Trail. For information call Linda Knight (488-3508).

South Coast

For information on the pending formation of this chapter, contact Bruce Rittenhouse (888-9328).

Umpqua Valley

10 Dec., Thur.

Richard Sommer will host a Christmas party at Hillcrest Vinyard, 240 Vinyard Lane. Please bring finger foods and your own table service. The public is welcome. Richard Sommer will present a program on his trip to Canada. For information, call Richard Sommer (673-3709).

Willamette Valley

* * * * *

For information, call Kathy Connelly (327-1212).

William Cusick

15 Dec., Tue.

Meeting: 6 pm ESD Office, 10100 N. McAllister, Island City. Potluck and slide show. Bring a dinner dish and three slides—one slide is your favorite shot of a native plant, another is one you want help identifying and the third is one you think nobody can identify. Prizes for best guesses or most stumped experts. For information, call Bob Ottersburg (963-4907).

NPSO NOTECARDS AVAILABLE

Our notecards feature seven rare plants drawn by Julie Kierstead plus one created by Eugene artist Valerie Sloane. Printed on pastel parchment-style paper in beige, grey-blue and green with matching envelopes, these notecards make lovely gifts. The collector quality works include Gentner's fritillary (*Fritillaria gentneri*), Kamchatka lily (*Fritillaria camchatcensis*), red clintonia (*Clintonia andrewsiana*), Myrtle Creek mariposa (*Calochortus coxii*), Barrett's penstemon (*Penstemon barrettiae*), rough popcorn flower (*Plagiobothrys hirtus*), triplet lily (*Triteleia laxa*) and Gorge daisy (*Erigeron oregonus*). Available through your local NPSO chapter; ask at meetings or see the Society Information page (p. 117) for the number of your chapter president. For more information contact Nancy Fredericks at PO Box 127, North Bonneville WA 98639 {(509) 427-8778}.

NPSO T—SHIRTS

How about a NPSO T-shirt?! On hand are long sleeve (L & XL) with NPSO logo in blue, *Polypodium* in grey, Trillium in jade or *Viola glabella* in teal. These are available through your local chapter, or they can be ordered through Jenny Dimling at PO Box 902, Eugene OR 97440, or call in an order at (503) 343-3242. Deadline for ordering the the 20th of December.

NPSO WINDOW STICKERS

These decals feature our trillium logo in green on an opaque white background, made to go on the inside of your car or other windows. They can be ordered from the High Desert Chapter, c / o Stu Garrett, 21663 Paloma Drive, Bend OR 97701. Minimum order is 5.

FINDING RARE PLANTS BY COMPUTER

What can rare and endangered chapter chairs do during the winter? Readers of the Bulletin may recall efforts last month to protect populations of *Lomatium bradshawii* identified in previous field seasons at the Short Mt. Landfill in Lane County.

Although I have since worn out my welcome at the site, the U.S. Supreme Court recently ruled (EPA vs. Dow Chemical) that aerial photography can provide admissible evidence in court, and best of all, does not constitute trespass.

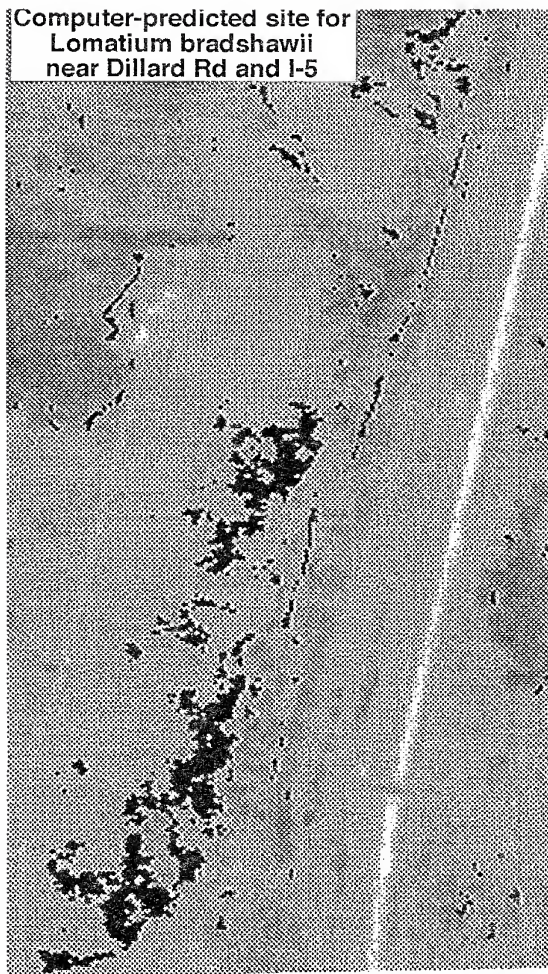
I decided to let my computer do some 'field work'. First, I obtained a high resolution color infrared contact print from USGS and scanned it into my MacIntosh at 600 dots per inch. Using a spot at Mt Pisgah where *Lomatium bradshawii* has been intensively studied by Tom Kaye, I set the tolerances on the magic wand tool in Adobe Photoshop software so that only the tiny patch of rare plants was selected. Next, the computer searched the rest of the photo for the signature of *Lomatium* habitat (individual plants are far too small to be seen). I then loosened the tolerances to find secondary habitat, repeated the search, and filtered the results with a hydric soil map.

To my astonishment, several other known sites popped up on the screen, including two landfill sites found by CH2M Hill! Even more exciting was a big new site west of the freeway. The computer thinks there could be up to twenty times as many plants there as Mt. Pisgah (which is the second largest known population left). Of course, an area might provide proper habitat but the plant could be extirpated there or never have colonized it. I won't know for sure until next spring.

Lomatium bradshawii is federally endangered and I am enthusiastic about the possibilities of identifying critical habitat for its recovery plan in this way. While it is feasible to search the whole Willamette Valley, the method is limited to non-forested areas where the plant is not in the understory.

—Tom Pringle
Emerald Chapter R&E Chair

Computer-predicted site for
Lomatium bradshawii
near Dillard Rd and I-5



PLANT CONSERVATION RESOURCE BOOK AVAILABLE

The Center for Plant Conservation has updated their publication listing individuals and organizations involved in conserving this country's native plants. The 1992 Plant Conservation Directory lists over 500 professionals and offices involved in such efforts, and summarizes state plant conservation laws. Included are resource-level contacts who can provide information about rare and endangered plants, permitting procedures and government programs, contacts in state Heritage Programs, Native Plant Societies, and other private organizations pursuing plant conservation.

To order, send check or money order for \$15 per copy to: Center for Plant Conservation, Missouri Botanical Garden, PO Box 299, St. Louis, MO 63166.

—Abridged from Fall 1992 *Kelsey*,
Newsletter of the Montana Native Plant Society

MONTIA DIFFUSA UPDATE

Some of you are aware that large populations of *Montia diffusa*, branching montia, were observed following the 1988 Shady Beach Fire on the Rigdon Ranger District of the Willamette National Forest. They became evident in 1989 while surveying the proposed salvage areas for Sensitive Plant Species.

At the time, *M. diffusa* was on the US Forest Service Region 6 Sensitive Plant List; the taxon considered rare but stable in Oregon and throughout its range, according to the Oregon Natural Heritage Program. In order to proceed with the proposed salvage harvest, it became necessary to conduct additional surveys to determine that adequate populations were present in areas that would not be disturbed by salvage activity. We found widespread occurrence in areas affected by the fire, at all elevations and aspects except those areas that experienced extreme burn. Vigorous populations were noted in burned units that had been clearcut in recent years and stocked with conifers.

After the fire, seven long-term vegetation succession study areas were established. Sites with pre-fire data were chosen, representing the variety of plant associations and burn intensities within the project. Plots were laid out along 100 ft. intersecting transects protected by a 300 ft. radius no-cut area. Only one study area, a severely burned location, did not include *M. diffusa*. In addition, the plots were duplicated in adjacent salvaged areas to allow comparison between the two treatments. *M. diffusa* was not found in the comparison plots.

A gradual decline in size and numbers of *M. diffusa* has been noted during the annual data collection at these sites. 1992 is the first year that we did not find the species. I have encountered it at a few locations elsewhere on the district, always with evidence of some wildfire disturbance.

In a letter thanking us for a *M. diffusa* specimen sent to the OSU Herbarium, Dr Kenton Chambers noted it is probable that ants disperse the seeds since they are attracted by the small food-body on the side of each seed. This coincides with our ob-

servations; removal of the duff layer exposed the stored seeds which resulted in a tremendous response of flowering plants the following season, but no plants found at those sites where the seed source was apparently destroyed by intense heat. Perhaps it has taken these three years for recovery of the ant population to fully utilize the numerous seeds produced by this annual.

A related situation has been reported from the 1991 Warner Creek Fire. This fire occurred on the Oakridge Ranger District in the Salt Creek drainage, which is adjacent to Hills Creek, site of the origin of the Shady Beach Fire. Surprisingly, no *Montia diffusa* was found during the Sensitive Plant surveys of Warner Creek Fire Project!

—Evelyn Everett
Emerald Chapter

EXPERIENCE HELLS CANYON AND ITS ENDEMIC FLORA WITH THE WALLOWA LLAMAS SPONSORED BY THE WILLIAM CUSICK CHAPTER

Possible trip dates are April 18th to 20th, and April 21st to 24th. The cost will be \$375 per person for the three day expedition. Wallowa Llama Outfitters will provide everything but your sleeping bag and pad. The llamas will carry up to 20 pounds of personal gear.

TRIP ITINERARY:

At 8 am we will leave Halfway, Ore., and head down to Hells Canyon Dam. We will boat down to Butler Bar just above Wild Sheep Rapids on the Idaho side, hike 4 miles and camp at Granite Creek for two days. A day hike towards the rim of the canyon will take us through several vegetation zones. On the third day we will hike 5 miles downstream to Bernard Creek where the boat will pick us up and transport us back to Hells Canyon Dam.

If interested in this expedition, contact:

Berta Youtie
PO Box 1188
LaGrande OR 97850,
or call (503) 963-4907

PUBLIC INPUT NEEDED ON FIRE MANAGEMENT

In October 1991, the Warner Creek Fire started east of Oakridge, Oregon where it burned nearly 9000 acres, all within a Habitat Conservation Area. (HCA) designated for the protection of the Spotted Owl. The Forest Service is currently developing a Draft Environmental Impact Statement (DEIS) for this area, and has chosen a preferred alternative and is now accepting public comment.

The Eugene Register-Guard reported the Warner Creek Fire as started by an arsonist. The Forest Service is awaiting the completion of an investigation. Meanwhile, the agency has stated that it will not consider the probability of future arson in forest planning (DEIS p.1-9). Despite the origin of this fire, this management plan may set a precedent on how to treat burn areas in the future.

The stated function of this HCA (HCA 0-10) is to "recreate a relatively unfragmented, natural landscape" and to "maximize the amount of superior (spotted owl) habitat". Likewise, the need for the proposed management action is the recovery of owl habitat and to increase knowledge of owl habitat and owl habitat recovery.

However, the agency preferred alternative allows the harvest of 1200 acres of the Warner Creek Fire. This management option has the second highest blow-down risk (ten times the risk of six of the eight plans' blow-down risk), and is the second lowest in area of quality "Owl Foraging Habitat" after 100 years. It also presents the second highest risk of damage to other threatened or endangered species, has the second highest risk of water quality and habitat damaging soil / debris torrents, and the second highest allowable cut.

If you are concerned over this issue, please write the Forest Service before December 22nd, 1992 to indicate the importance of the probability of future arson, and the need to more strongly protect sensitive species. Send your comments to:

Warner Public Affairs Officer
Oakridge Ranger Station (782-2291)
46375 Highway 58
Westfir OR 97492

—J.S. Foster

SIX COUNTIES — SIX PATHS

As the January 15, 1993 deadline for county ordinances enacting the Columbia Gorge National Scenic Area Management Plan approaches, there are a variety of scenarios which could occur.

A county can submit an ordinance regarding both General Management Areas and Special Management Areas (SMA) for the respective county. The Gorge Commission, by a majority vote including three members of each state, then has 90 days to determine if the ordinance is consistent with the Management Plan. If the ordinance is deemed consistent, the Secretary of Agriculture then has 90 days to review the SMA portion. If the ordinance is approved by both the Commission and the Secretary, we can expect implementation within six months of the January 15 deadline.

If a county does not submit an ordinance by the deadline, the Commission must make a determination that the county has failed to comply with the Act and must enact an ordinance for that county. A county can at any time submit an ordinance, which would begin the review process as mentioned above. The incentive for a consistent county ordinance lies in the economic and recreation development funds made available by the Act.

Presently each Gorge county is approaching the ordinance development process at a different pace:

Multnomah County has submitted a draft ordinance to its Planning Commission. Following public comment and review, the Multnomah Planning Commission will recommend a Final Draft to the County Commissions. They will then hold public hearings prior to submitting a final document to the Gorge Commission.

Hood River County will soon begin drafting a county ordinance and will follow a public involvement process similar to that of Multnomah County. This is stipulated with the provision by the county that an agreement can be reached in regard to county lands located east of Hood River along the abandoned Historic Columbia River Highway.

The **Wasco County** Planning Commission and Citizen Advisory Group has completed review and public hearings of the county ordinance. Wasco

County Commissioners have withheld final approval until concerns regarding the county's taking liability are resolved.

Klickitat County has notified the Gorge Commission that they will not develop an ordinance. As outlined in the Act, the Gorge Commission must develop and implement the county's ordinance.

The **Skamania County** Planning Commission has begun development of the county ordinance. They will be working with the public on this through a series of ten workshops and hearings. There will be also an advisory ballot in November asking voters for their opinion in regard to Skamania County's drafting of an ordinance.

Clark County has requested an extension due to staff and budget limitations. The Gorge Commission has not replied.

The Friends of the Columbia Gorge will continue to work with residents to facilitate their participation. The involvement of local residents will continue to be an essential component in the success of strong county ordinances. They look forward to the development of effective land use ordinances and need your involvement. Call Tamra Lisy, Education Outreach Coordinator, at (503)241-3762.

—Reprinted with slight revisions
from the Fall 1992 Newsletter of
Friends of the Columbia River Gorge

ABERT LAKE HYDRO PROJECT?

A quixotic scheme to help satisfy Colorado and southern California's energy greed has been conceived at the expense of Oregon's scenic and biologically unique Abert Lake and Abert Rim. A California engineer has applied for permission for a \$2 million study to determine the feasibility of the project.

The concept of the project is relatively simple, but the magnitude is stunning. Water would be pumped to the top of Abert Rim during times that more energy is available than is being used. Then, during times of energy shortage the water would be released back to Abert Lake to produce elec-

tricity. If the project were to go forward Abert Lake would undergo the following changes. The lake would be transected into three ponds separated by 30 foot high dikes totaling about six miles in length. Water would be pumped from one section into another, then filled with fresh water (Abert Lake is more saline than the ocean). Abert Rim (a BLM Wilderness Study Area) would undergo even more drastic alterations. Two 36 foot diameter "power shafts", two large "surge shafts" and one 30 foot diameter access shaft would all extend from the base of the rim to the top of the rim 1600 feet higher. A 500 by 100 foot, 200 foot high cavern would be mined beneath the rim for the powerhouse. Several tunnels would be carved from the powerhouse to the lake, one housing a paved two lane road 1.5 miles long. On top of the rim a converter station, 46 miles of power lines, 23 miles of road and Oregon's largest dam away from the Columbia River would be constructed.

Abert Lake hosts Oregon's highest concentration of nesting snowy plover, a State listed Threatened Species. It provides brine shrimp, alkali flies and algae for countless numbers of migratory shorebirds, waterfowl and other wildlife. Peregrine falcons, a Federal Endangered Species, use the area and may nest there. The proposed project would jeopardize these animals because their habitat would be irreparably harmed.

Recognizing the unique and important values of the area, the Oregon Department of Fish and Wildlife has recommended that the Federal Energy Regulatory Commission deny the exploratory application and has proposed that Abert Lake be designated an Area of Critical Environmental Concern. The Oregon Natural Desert Association (ONDA) has requested intervenor status in the permit process. Although the project appears ludicrous, it cannot be ignored. ONDA will watch the process closely and will litigate if necessary.

What can you do to help? The most important thing you can do is to visit Abert Lake and Abert Rim and record the dates and purpose of these visits. In order for ONDA to have status as an "interested party" and be able to appeal or litigate we must be able to show that our members use and enjoy the area. Please send ONDA any documentation you might have of visits and they will be kept on file.

—Reprinted with slight revision from
"Desert Ramblings", newsletter of the
Oregon Natural Desert Association, Fall 1992

BITS AND PIECES

—NEWS AND INFORMATION FROM ALL OVER

MARBLED MURRELET LISTED AS ENDANGERED

After Bush administration inspired foot-dragging, the US Fish and Wildlife Service in early October listed the Marbled Murrelet as an endangered species throughout its range. The small bird spends most of its time at sea but nests only in old growth within fifty miles of the coast. The net effect of the listing will be stopping most old growth logging in the Coast Range. This species is dependent on old growth, specifically on large limbs present only on very old trees which support their nests.

Oregon and Washington Audubon chapters and the Oregon Natural Resources Council petitioned to list the bird two years ago. USFWS came near to listing it more than a year ago, but actions by Bush administration officials lead to excuses for not acting instead. The Federal District Court in Seattle, ruling on a lawsuit over the delays, stated that the USFWS acted arbitrarily and inappropriately rather than following proper administrative procedures. After an unsuccessful agency appeal, the USFWS was given two days to make a decision on listing, which it did.

RECENT LEGAL RULINGS AFFECT ABILITY OF ENVIRONMENTAL GROUPS TO INTERVENE IN LAWSUITS

A series of US Supreme Court rulings have made it more difficult for environmental groups to intervene in lawsuits before the court or to bring lawsuits against the government. The ability of any group to have standing in a matter before the Court is being interpreted as requiring documented proof that members of that group actively use the area. If such use cannot be proved, then standing is being denied.

The National Wildlife Federation saw their standing in a Wilderness Area suit denied because they did not have backup evidence to prove that their members actually backpacked in the region as claimed. The Defenders of Wildlife was denied standing in another case because they didn't state that their members would ever use the area again.

This new legal interpretation has led some organizations to ask their membership to record and send into the group documentation of use of any area which might conceivably be subject of a future lawsuit. It is no longer acceptable to merely state that use of the area in question occurs; that use must be documented.



Trileteia laxa
Triple lily
From the NPSO
Rare and Endangered Plants Notecard Series
Drawn by Julie Kierstead

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GUIDELINES FOR CONTRIBUTORS

The NPSO *Bulletin* is published monthly as a service to NPSO members and the public. Contributions of all types are welcome.

DEADLINE: Copy is due with the editor by the 10th of each month. Submissions can be in any form. Author's name & affiliation are at the end of the article. Double space between paragraphs. For special materials (e.g., plant keys) choose an appropriate format, keeping in mind that readers may wish to carry your article pasted inside their favorite field guide. Formatting assistance is available from your editor. All *Bulletin* articles now go into the new NPSO database via computer. Camera-ready copy is not used, with rare exceptions.

Computer output: The editor prefers articles submitted on Macintosh or IBM disks, or via modem. Contact the editor for details.

Illustrations: Line drawings, prints, and high contrast B&W prints are useable. Some Macintosh graphics can be used also. Contact the editor about our current needs, or send them along with your article.

Credits: If the item is not original, name and date the source. For original items, identify the author and indicate, for news items, if a by-line is desired. Indicate whether the item is to be used in its entirety or excerpted at the editor's discretion.

Scientific Names: Nomenclature should follow *Flora of the Pacific Northwest*, by Hitchcock et al., when appropriate. Use both scientific and common names if possible. *Italicize* genus and species, or underline.

Return of Originals: Submissions are not returned unless requested.

Membership in the Native Plant Society of Oregon is open to all.

Membership applications, renewals, and changes of address (include old address and zip code) should be sent to the Membership Chair.

NATIVE PLANT SOCIETY OF OREGON MEMBERSHIP FORM

Name _____

Chapter (if known) _____

Address _____

Is this a change of address?

If so, please write your *Old Address* here:

City _____ State _____ Zip+4 _____

Phone (Home) _____ (Work) _____

City _____ State _____ Zip _____

* **DUES** include monthly NPSO *Bulletin*. Full membership is for a calendar year, January through December. New memberships enrolled during September through December are charged a reduced "Quarter Membership" rate.

() New	() Renewal	() Quarter Membership (Sep.-Dec.) \$3.00	() <i>Bulletin</i> Subscription only \$12.00
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Leighton Ho Memorial Award Fund..... \$ _____
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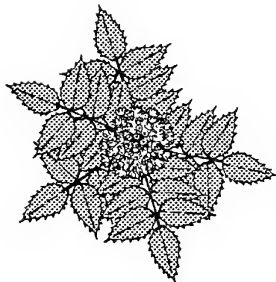
Jan Dobak, NPSO Membership Chair, 2584 NW Savier St., Portland OR 97210-2412.

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